NINTH

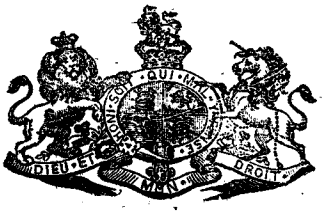
ANNUAL REPORT

OF

THE DEPUTY MASTER OF THE MINT.

1878.

Presented to both Houses of Parliament by Command of Her Majesty.



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NINTH ANNUAL REPORT

OF

THE DEPUTY MASTER OF THE MINT.

SIR,

I HAVE the honour to submit, for the consideration of the Lords Commissioners of Her Majesty's Treasury, my Ninth Annual Report on the Royal Mint.

In consequence of the continued depression of trade, the demand for coin during the year 1878 has again been below the average, and for the first time since 1870 the Mint has been able itself to meet all demands for imperial coin, and to undertake the execution of the Colonial coinages required, without having recourse to contracts with private firms. It is unnecessary to state that even the limited amount of work devolving upon it has been sufficient to keep the machinery of the Department in constant occupation.

The coins struck during the year 1878 were of twenty-two different denominations, namely :— Coinages executed during the year.

British Coinage.

Gold.—Sovereigns.
Half-sovereigns.
Silver.—Half-crowns.
Florins.
Shillings.
Sixpences.
Fourpences (Maundy money only).
Threepences.
Twopences (Maundy money only).
Pence (do.).
Bronze.—Pence.
Halfpence.
Farthings.

Straits Settlements.

Silver.—Twenty Cents.
Ten Cents.
Five Cents.

Mauritius.

Silver.—Twenty Cents.
Ten Cents.
Bronze.—Five Cents.
Two Cents.
Cents.

Malta.

Bronze.—One-third Farthings.

The total number of pieces struck at the Mint was 24,491,230, as against 30,131,130 in 1877, and their value, real or nominal, 2,785,790*l.* 6*s.* 2½*d.**

The total number of British coins struck during the year was 22,823,230, and their value as follows:—

	£	s.	d.	£	s.	d.
Gold:						
Sovereigns - -	1,091,275	0	0			
Half-sovereigns - -	1,040,970	10	0			
				2,132,245	10	0
Silver:						
Half-crowns - -	183,290	7	6			
Florins - - - -	178,668	0	0			
Shillings - - -	156,356	11	0			
Sixpences - - -	65,613	2	6			
Fourpences (Maundy) -	95	11	8			
Threepences - - -	30,305	15	9			
Twopences (Maundy) -	55	18	2			
Pence (do.) -	41	5	3			
				614,426	11	10
Bronze:						
Pence - - -	11,518	12	6			
Halfpence - - -	2,969	17	3½			
Farthings - - -	4,175	11	3			
				18,664	1	0½
Making a total of - - -				2,765,336	2	10½

Gold coinage.

The coinage of gold, as will be seen from the above statement, but slightly exceeded 2,000,000*l.*, of which one-half consisted of half-sovereigns, notwithstanding that the number of sovereigns from the Sydney and Melbourne branches of the Mint received by the Bank of England during the year was only 2,773,900*l.*, or less by nearly a million than the amount received in 1877. It is clear,

* For detailed statement, see Appendix, page 35.

therefore, that the smallness of the demand on the Mint for gold coin, which has now continued for three years, is due to the general contraction of trade rather than to any large and increasing supply of sovereigns coined in Australia.

Importation of light gold coin for re-coinage.

No light gold coin was sent in by the Bank of England for re-coinage during the year, but, as stated in my last Report,* nearly the whole of the gold coinage which was commenced in November 1877, and of which the coinage of 1878 was a continuation, was from light gold, and during the two years, therefore, out of a coinage of 3,230,986*l.*, 1,557,500*l.*, or nearly one-half, consisted of worn coin withdrawn from circulation.

Silver coinage.

The coinage of silver has been comparatively large, notwithstanding the fact, to be noticed below, that an unusually large quantity of worn silver coin has been withdrawn from circulation during the year. The amount coined was 614,426*l.*, as against 407,822*l.* in 1877, and of this sum 567,328*l.* was issued to the public.

The issues consisted of 215,500*l.* to the Bank of England, 156,200*l.* to the Bank of Ireland, 41,000*l.* to Scotch banks, 69,950*l.* to the Colonies, 74,250*l.* for Treasury chests abroad, and 10,075*l.* in threepences supplied direct to private applicants. The total amount of the latter coins issued was 30,425*l.*, as against 30,115*l.* in 1877, and was again reduced, as in the two preceding years, by an arrangement under which persons applying for small sums were referred to a Banking Company holding a larger stock than it required for its own use.

Half-crowns of the nominal value of 132,700*l.* have been issued during the year, and the total amount of these coins issued since 1874, when it was decided to resume their coinage, has thus been raised to 675,600*l.*

England.

I append, as in former years, a table showing the amount of silver coin issued by the Mint to the Bank of England, and by the Bank to the public, with the amount of worn silver coin withdrawn from circulation by the Bank, during recent years :—

Year.	Received by the Bank from the Mint.	Issued by the Bank to the Public.	Received by the Bank from the Public.	Worn Coin withdrawn from Circulation.
	£	£	£	£
1867	87,000	—	17,000	60,000
1868	175,000	193,000	—	75,000
1869	30,000	228,000	—	105,000
1870	188,000	328,000	—	80,000
1871	566,000	650,000	—	75,000
1872	972,000	910,000	—	65,000
1873	578,000	595,000	—	95,000
1874	500,000	432,000	—	115,000
1875	481,000	433,000	—	143,000
1876	87,000	57,000	—	275,000
1877	186,300	66,000	—	170,000
1878	215,500	187,000	—	220,000

* Eighth Annual Report (1877), page 4.

The figures for 1878, as compared with those for the two previous years, are not without interest. It will be seen that, although in each year since 1869 (except in 1876, when special causes intervened to interrupt the coinage) the issues from the Mint to the Bank have been important, the issues by the Bank to the public in 1876 and 1877 were very greatly below the average. In 1878, however, the amount issued by the Bank to the public increased to 187,000*l.*, as against 57,000*l.* in 1876 and 66,000*l.* in 1877, an increase which appears to show that the demand for silver coin in England and Wales has to some extent revived. On the other hand, it is to be remarked that the amount of worn coin withdrawn from circulation in 1878, 220,000*l.*, has again been very large, and, with the amounts withdrawn in 1876 and 1877, 445,000*l.*, exceeds the issues for the three years, 310,000*l.*, by 355,000*l.*, so that the coin in circulation in England and Wales alone was less by the latter amount at the end of 1878 than it had been at the beginning of 1876.

Scotland and Ireland.

I also append a statement, in continuation of those given in former Reports, showing the issues of silver coin to Scotch banks and to the Bank of Ireland, and the amounts of worn coin withdrawn from circulation by their means in Scotland and Ireland respectively, from 1872 to 1878 inclusive :—

Year.	New Coin issued.		Worn Coin withdrawn from Circulation.	
	To Scotch Banks.	To Bank of Ireland.	In Scotland.	In Ireland.
	£	£	£	£
1872	180,000	Nil.	26,510	15,000
1873	154,000	2,000	73,263	Nil.
1874	Nil.	5,000	25,900	10,400
1875	67,550	50,000	11,000	Nil.
1876	Nil.	20,000	Nil.	Nil.
1877	94,000	10,000	37,280	Nil.
1878	41,000	156,200	72,635	105,500

It will be seen that the amount of new coin issued for circulation in Scotland has not been large, while the amount of worn coin withdrawn has been greater than in any year since 1873, when the renewal of the silver coinage in Scotland and Ireland had been but recently undertaken.

In Ireland I am happy to say that it has at length been found possible to make arrangements for the systematic issue and withdrawal of silver coin. I have in two former Reports* expressed

* Seventh Annual Report (1876), page 7, and Eighth Annual Report (1877) page 6.

my regret that the renewal of the silver coinage in that country had not proceeded with the rapidity which could have been desired, and in my Report for 1877 I added that further efforts would be made to induce the Irish banks to co-operate in effecting so desirable a reform. I have now to report that during the past year, at the request of the Master of the Mint, the Court of Directors of the Bank of Ireland and the Directors of all the leading Irish banks have agreed to act together, as the Scotch banks have done since 1872, in making application for new coin, and in collecting and sorting worn coin and transmitting it to this Department for re-coinage. The result has been that before the close of the year new coin of the nominal value of 156,200*l.* was shipped to Ireland, and 105,500*l.* in worn coin sent back to the Mint, whereas during the six years from 1872 to 1877 inclusive the total amount of new coin issued to the Bank of Ireland had only been 87,000*l.*, and the amount of worn coin withdrawn only 25,400*l.* This result cannot but be considered satisfactory, and justifies the hope that no further difficulties will arise to prevent the complete and speedy renewal of the silver currency in Ireland.

Colonies.

The following statements give the amounts of silver coin sent to, and withdrawn from circulation in, Colonies during the past year:—

SILVER COIN TRANSMITTED TO COLONIES.

	£	s.	d.
Falkland Islands	500	0	0
Natal	2,300	0	0
West Indian Colonies	10,000	0	0
Victoria	5,000	0	0
South Australia	12,000	0	0
West Africa	2,500	0	0
New Zealand	16,750	0	0
Queensland	20,000	0	0
Malta	500	0	0
Bermuda	400	0	0
	£69,950	0	0

WORN SILVER COIN WITHDRAWN FROM COLONIES.

	£	s.	d.
New South Wales	5,452	0	0
Gold Coast	1,600	0	0
Malta	1,000	0	0
Sierra Leone	500	0	0
Bermuda	400	0	0
	£8,952	0	0

The amount of new silver coin supplied to Colonies was less by nearly 25,000*l.* than the amount, 94,475*l.*, sent out in 1877, and, out of a total of 69,950*l.*, 53,750*l.*, or more than three-fourths, were shipped, as in the preceding year, to the Australian Colonies and New Zealand. On the other hand, the withdrawals of worn coin from circulation have been rather larger than in 1877, and have not been confined, as in that year, to New South Wales.

Renewal of silver and bronze coinages in Colonies.

In November last I brought under their Lordships' notice a Report from the Deputy Master of the Melbourne Mint, enclosing a representation from the Associated Banks of Melbourne as to the condition of the silver coinage in Victoria, and recommending that the subject of the renewal of the silver coinage in that Colony should receive further consideration at their Lordships' hands. It has been my duty on several occasions,* while reporting that the arrangements made in 1871† for the renewal of the silver coinage in Colonies had generally been attended with satisfactory results, to call their Lordships' special attention to the somewhat exceptional position of Victoria in regard to this question, and to the fact that the Government of that Colony, though one of the first Colonial Governments to accept the conditions offered by the Treasury, had since 1872 taken no official steps for the issue or withdrawal of silver coin. The regulations of 1871 provided that Colonial Governments should make applications to the Mint, through their agents in this Country, for such new silver coin as the Colony might require, undertaking the payment of all expenses connected with its shipment, including packing, freight, insurance, and shipping charges, and paying for it, on delivery to their agents, its nominal value: and that the Imperial Government should receive all worn silver coin withdrawn from circulation and delivered at the Mint or one of its Branches (at Sydney or Melbourne), paying for it, on receipt, its nominal value. Under this arrangement a sum of 795,425*l.* in new silver coin has, during the seven years ended the 31st of December 1878, been supplied by this Department on the demand of agents for Colonial Governments, while 67,460*l.* in worn coin has been withdrawn from circulation in Colonies. Of the new coin 460,200*l.* has been shipped to the Australian Colonies, including 190,152*l.* to New South Wales, where the circulation was reported by the late Deputy Master of the Sydney Mint at the close of 1877 to be "in a very satisfactory condition."‡ In Victoria, however, which occupies a position similar to that of New South Wales, in so far that it possesses a Branch Mint, the adoption of the regulations has not, it would appear, been found equally effectual, no official steps, as above stated, having been taken since 1872 to withdraw worn coin from circulation, and the consignments of new coin since 1874 having been insignificant. Mr. Broughton was amply justified,

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* See Fifth Annual Report (1874), page 23, Sixth Annual Report (1875), page 17, and Seventh Annual Report (1876), page 18.

† See Second Annual Report (1871), page 52.

‡ Eighth Annual Report (1877), page 55.

therefore, in drawing attention to the matter, and in stating that a further immediate supply of 50,000*l.* in silver coin would be required to place the silver currency of Victoria in a proper condition, and that the annual requirements of the Colony would amount to 20,000*l.*

The Associated Banks of Melbourne stated that they had on several occasions imported silver coin at their own expense, that they did not consider that to be a duty which should be imposed upon them, and that, when recently appealed to by the Government of Victoria, they had declined to incur the cost of making further importations. They requested, therefore, that arrangements might be made between the Mint and the Melbourne Branch, by which new silver coin could always be supplied by the latter "free of cost," that is to say, without any charge beyond payment of the nominal value of the coin. The question of the coinage of silver for Colonies was exhaustively dealt with in the letter which their Lordships caused to be addressed to the Colonial Office under date of the 8th of December 1873, and to which reference was made in my Report for that year.* In that letter My Lords pointed out the numerous difficulties which attend the management of a token coinage, and stated that, while putting aside all question of the profit accruing to the Exchequer from the issue of the coin, they considered it necessary that, in the case of coin having a general circulation throughout the Empire, the Imperial Government should undertake the duty of controlling its issue and withdrawal. In bringing this letter to their Lordships' recollection, I submitted that it was a matter of grave importance to consider how far the withdrawal of any of the safeguards by which the issue of token coin is surrounded is advisable, and that, while the fact that a profit accrues on such coin would not weigh with the Government, it was the duty of the State, in the interests of the community itself, to exercise such a supervision as will effectually prevent an over-issue and the consequent depreciation of the coin, which, it should be remembered, is only legal tender to the amount of forty shillings. I reported at the same time that there would be no difficulty in complying with the application of the Associated Banks, if their Lordships saw fit to authorise the Master of the Mint to incur, on behalf of the Imperial Government, all the expenses of packing, freight, insurance, &c., payable under existing regulations by the agent of the Colony. I suggested that in the case of New South Wales and Victoria, which possess Branches of the Mint, their Lordships should permit this Department to ship silver coin to each Branch, and to accept payment for it in instalments as it was disposed of in the Colony, which is the course already pursued, under Treasury sanction, in the case of bronze coin sent to Sydney and Melbourne, and that the Deputy Masters should be instructed to comply with all demands for silver coin, unless

* Fourth Annual Report (1873), page 24.

they should see any special reason for not doing so, in which case they might be authorised, with the approval of the Governors, to refuse the application. I pointed out, in conclusion, that should silver coin be issued free of all expenses, the Colonial Governments should be reminded that it would still rest with them to make arrangements for the withdrawal of worn coin, and that effectual steps should be taken for that purpose.

Their Lordships have been pleased, since the close of the year, to make the concession requested of them by the Associated Banks of Melbourne, extending it to all Colonies, and authorising the Master of the Mint to maintain a stock of silver coin at the Branch Mints at Sydney and Melbourne, for issue by the Deputy Masters, as recommended. Under their Lordships' directions, therefore, the regulations of 1871 have been amended, and have been made to include bronze as well as silver coin; and from the 12th of February 1879, the date of the Treasury Order approving of the change, this Department has been authorised to pay all charges incidental to the carriage of new silver and bronze coin to Colonies, and of worn coin to the Mint or one of its Branches, which I have estimated at about 3,000*l.* a year.

I append* a copy of the correspondence between the Treasury and the Colonial Office on this subject.

Seignorage.

The average market price at which standard silver has been purchased for coinage during the year is $50\frac{1}{16}d.$ per ounce, so that, as the rate at which silver coin is issued by the Mint is $66d.$ per ounce, the seignorage accruing to the State has been at the rate of $15\frac{15}{16}d.$ per ounce, or $31\frac{3}{4}$ per cent. The average price at which silver was purchased by the Mint in 1877 was $56\frac{1}{16}d.$ per ounce, the purchases having become necessary in the early part of the year, when the price was at its highest, and the rate of seignorage for that year was only $17\frac{3}{4}$ per cent. The rate of seignorage in 1878, therefore, exceeded that for the previous year by no less than 14 per cent.† I subjoin a table, in continuation of that given in my last Report,† showing the rate at which seignorage has accrued in each year from 1870 to 1878 inclusive:—

Year.	Rate of seignorage.
1870	9 per cent.
1871	$9\frac{1}{4}$ „
1872	$9\frac{1}{2}$ „
1873	$12\frac{1}{4}$ „
1874	$12\frac{1}{3}$ „
1875	16 „
1876	(No silver bullion bought).
1877	$17\frac{3}{4}$ per cent.
1878	$31\frac{3}{4}$ „

* Appendix, page 48.
† Eighth Annual Report (1877), page 7.

I give in the Appendix,* as usual, a Return of sums advanced by the Treasury to the Master of the Mint from the Consolidated Fund for the purchase of bullion for coinage, and of amounts repaid to the Exchequer, since the year 1837 inclusive. The figures for 1878 show that the repayments exceeded the advances by 100,000*l.*, and that the balance due to the Exchequer at the close of the year therefore was only 285,000*l.*, as against 385,000*l.* at the close of 1877. The amount owing by the Mint to the Exchequer on this account at any given time is represented, as has been explained in former Reports, by the cash balance standing to the credit of the Master of the Mint at the Bank of England, and by the coin and bullion in stock.

Bronze coinage.

I have already mentioned that no contract has been made during the year for the execution of any British or Colonial coinage by a private firm. The demand for bronze coin has again been moderate, and there has been no necessity, therefore, to make special arrangements for the supply of large quantities of coin, as in 1875 and 1876, during which years 150 tons of pence, halfpence, and farthings were struck under contract by Messrs. Ralph Heaton and Sons of Birmingham. The stock of bronze bars in hand being sufficient, none were purchased during the year.

The issues of bronze coin amounted to 39,205*l.*, as against 42,050*l.* in 1877. Of this amount, 26,530*l.* consisted of pence, 8,620*l.* of halfpence, and 4,055*l.* of farthings, so that the issue of pence was considerably less, while that of halfpence and farthings was rather larger, than in 1877. This result is to be accounted for by the fact that from January to November the issue of pence was suspended in the metropolitan district, and applicants were referred, as on former occasions, to brewing firms in London who had intimated that they held stocks in excess of their own requirements. The shipments of bronze coin to Colonies, and in aid of Treasury Chests abroad, amounted to 5,400*l.*, as against 8,040*l.* in 1877, the principal consignments being 2,000*l.* to the Melbourne Mint for issue in Victoria, and 1,250*l.* to South Australia.

Old copper coin.

Notwithstanding the decrial of the old copper coinage in 1869 and their Lordships' decision, of which due notice was given to persons who had been in the habit of collecting the old coin, that it could not be received at its full nominal value after the 30th of July 1873, applications have continued to be received even during the past year from tradesmen and others, residing chiefly in country districts, to be relieved of trifling amounts of copper coin remaining in their hands. Some of the applicants appeared to have collected pence of a particular reign or year under the mistaken impression that the coins possessed some special value, but it was necessary to reply to all such requests that copper coin had, under proclamation of the 13th of May 1869, ceased to be legal tender from the end of that year, and could not be received at its nominal

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* Appendix, page 44.

value. Such applications afford additional evidence of the length of time required for the complete withdrawal of a large coinage which has been for many years in circulation.

Coinage of one-third farthings for Malta.

On the 5th of November a request was received from the Government of Malta for a coinage of 100*l.* in the small bronze pieces of the nominal value of one-third of a farthing circulating in that Island, and this coinage, consisting of 288,000 pieces, was executed by the Mint in the month of December. The last occasion on which pieces of this denomination were issued was in July 1876, as shown in my Report for that year.*

Colonial coinages.

Only two other applications for Colonial coinages were received during the year, namely, for a silver and bronze coinage for Mauritius, of the nominal value of 17,500 rupees, in twenty, ten, five, two, and one cent pieces, and for a silver coinage for the Straits Settlements, consisting of pieces of twenty, ten, and five cents, of the nominal value of 90,000 dollars, which were executed at the Mint in February and July respectively. This is the second subsidiary coinage which has been issued for Mauritius since the adoption of the rupee of India as the standard of value in the Colony under the Order in Council of the 12th of August 1876, of which a copy was appended to my Report for that year.† Details of the first coinage, which consisted of pieces of the same denomination as those coined in 1878, will be found in the same Report.

Bronze coinage for Cyprus.

Soon after the close of the year their Lordships were pleased to refer to me a proposal from the High Commissioner of Cyprus for the coinage of a bronze piastre for circulation in that Island as the 180th part of the pound sterling, and of a half and quarter piastre of proportionate nominal value. Sir Garnet Wolseley having recommended that the new piastre should be larger and heavier than the penny, of which the weight is 145·833 grains, I proposed that the weight of the piastre should be fixed at 180 grains, and that of the half and quarter piastres at 90 and 45 grains respectively. As regards the design of the coins, I recommended that the obverse should bear the effigy of Her Majesty, with the words "Victoria Queen," and the date, and the reverse the large numerals "1," "$\frac{1}{2}$," "$\frac{1}{4}$," with the words "Cyprus" and "One Piastre" (or "Half Piastre," or "Quarter Piastre," as the case might be) above and below them.

Their Lordships having been pleased to approve of these proposals, and the design having been submitted for the approval of Her Majesty, the necessary dies were struck, and the coinage was executed and shipped to Cyprus in the month of March. The total number of pieces struck was 650,000, of which 250,000 were piastres, 250,000 half-piastres and 150,000 quarter-piastres. The nominal value of the coinage was 2,291*l.*

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* Seventh Annual Report (1876), page 10.
† Do. do. page 58.

The usual Return showing the coinage executed during the last ten years is given in the Appendix,* together with the other Returns and Accounts as appended to former Reports. Coinage Returns.

The result of the transactions of the Mint for the year, as shown in the General Account,† has been a net loss of 51,543*l.* So unusual a result makes it necessary to examine the account somewhat in detail. The circumstances of the year 1878 have necessarily been unfavourable to the Mint so far as concerns the pecuniary result of its operations, the comparatively small amount of silver bullion purchased for coinage, and the excessive quantity of worn silver coin withdrawn from circulation, having both contributed to reduce the profits of the Department. These profits consist in a great measure of the gain resulting from the conversion of silver bullion bought at the market price of the day into coin issued at a rate considerably in excess of its intrinsic value, whereas loss accrues on the purchase of worn silver coin withdrawn from circulation, which is paid for at its full nominal value. If, therefore, the amount of silver bullion purchased and coined is small, and the amount of worn coin withdrawn is large, the profits of the Mint are diminished and its expenses sensibly increased. It will be seen that in 1878 the profit on the coinage of silver bullion amounted only to 31,993*l.*, as against 53,576*l.* in 1877, while the loss on worn silver coin, including the coin withdrawn by the Sydney Mint, was 48,959*l.*, as against 28,744*l.* in 1877. But, further, the profit on the bronze coinage shown as having accrued during the year was only 1,751*l.*, as against 37,797*l.* in 1877. This is to be accounted for by the fact that in 1878 no bronze metal was purchased for coinage, the metal used for the manufacture of coin during the year having merely been a part of the balance in stock at the end of 1877, the profit upon which had already been brought to account. It should also be observed that the balance of the "waste" which had accrued on a gold coinage of more than 8,000,000*l.* completed in the month of June last, fell due and was paid to the Bank of England during the year. While recording this result of the operations of the year, it is satisfactory to note that since 1872, when a "General Account" was first made up, there has been no year except 1876, when the coinage was suspended for five months in consequence of a breakdown of machinery, in which the receipts of the Department have not considerably exceeded its expenses. The excess of receipts over expenditure has ranged from 98,313*l.* in 1872 to 26,435*l.* in 1874, and it should be remembered that under the head of "Expenses" are included the amounts paid for superannuation and compensation allowances, and all expenses incurred by the Office of Works for repairs of buildings, parochial rates, coals, stores, &c., and generally by other Departments on behalf of the Mint.

The Parliamentary Vote for the expenses of the Mint for the year 1878–79 was 51,035*l.*, but the amount voted under the Sub- Estimates.

* Appendix, page 45.
† Appendix, page 41.

head "Loss on worn silver coin withdrawn from circulation," 25,000*l.*, was soon after the beginning of the year found to be quite inadequate, owing to the unprecedentedly large quantities of worn coin sent in to the Mint for re-coinage, and it became necessary in the month of July last to request their Lordships to cause a Supplementary Vote for 30,000*l.* to be submitted to Parliament, to be accounted for under that Sub-head. I have already referred* to the very large amounts of worn coin withdrawn from circulation in the year 1878 in England and Wales by the Bank of England, and I may here state that the total amount withdrawn from the United Kingdom and Colonies was during that year 419,987*l.*, and during the financial year 1878–79 no less than 500,722*l.* The loss on the withdrawal of the last-named amount has been 56,308*l.*, or 1,308*l.* more than the total sum voted, 55,000*l.*

Guided by the experience of the past financial year, I have not thought it desirable that the sum to be voted for loss on worn silver coin in 1879–80 should be less than 35,000*l.*, or 10,000*l.* more than the original estimate of 1878–79. It remains to be seen whether this sum will be sufficient, but it may fairly be hoped that, after the very large withdrawals of the previous year, the amounts to be received may not be so great as to render a Supplementary Vote necessary. In consequence of their Lordships' decision that expenses incidental to the renewal of the silver and bronze coinages in Colonies shall for the future be paid by the Mint instead of by the Colonial Governments, a new Sub-head "L" has been created, for the "Supply of silver and bronze coin to Colonies," under which the sum voted has been 3,000*l.* It is for obvious reasons difficult to estimate the sum likely to be required for this service, but I may mention that, in fixing the amount at 3,000*l.*, allowance has been made for the increased demand for new coin which may follow the announcement that all charges will be borne by the Imperial Government. In other respects the Estimate for the current financial year, 1879–80, is not abnormal. It shows a slight increase under the Sub-head "Police" for the reasons stated in my last Report,† but on the other hand there is a reduction in the sums taken for "Alloy-metal," "Brokerage," and "Loss on Coinage, Silver" of 250*l.*, 150*l.*, and 250*l.* respectively, as compared with the sums voted under those Sub-heads for the last six years. The expenditure for these services has been in 1876–77 and 1877–78 considerably less than had been estimated, and there is no reason to doubt that the reductions can safely be made.

Mint Office.

There has again been a large increase in the amount of specie packed for the use of Treasury Chests abroad, the shipments for the year having been 833,612*l.*, as against 503,649*l.* in 1877. Of

* Page 6.
† Eighth Annual Report (1877), page 14.

this amount 499,265*l.* consisted of British coin, namely, 424,500*l.* in sovereigns and half-sovereigns, 74,250*l.* in silver coin, and 515*l.* in bronze coin, of which more than 400,000*l.* was shipped to Malta and Cyprus; and 334,347*l.* of Mexican dollars sent to Hong Kong and the Straits Settlements.

Visitors.

The visitors to the Mint during the year were not quite so numerous as in 1877, the number of orders of admission having been 1,692, and the number of persons admitted 6,666.

Operative Department.

The Memorandum of the Superintendent of the Operative Department, which I append, as usual, to this Report,* merely contains a detailed statement of the proceedings of that Department during the year, and does not deal with any point of special interest.

I may briefly allude, however, to the adoption, noted by Mr. Hill, of plumbago annealing-pots for silver and bronze blanks. These pots were in 1877 substituted for the copper tubes previously used for annealing gold blanks, and a considerable saving was effected by the change. Mr. Hill now describes the manner in which their use has been extended to the treatment of silver and bronze, an arrangement which has been in force during the greater part of the year. I may also call attention to the erection of a steam-hammer, which is used for forging dies and executing other work of a similar description. The acquisition of a steam-hammer, which saves a large amount of manual labour, has rendered it unnecessary for me to recommend the employment of an additional Smith and Hammerman, whose services would otherwise have been required.

Scientific arrangements.

The annual Memorandum of the Chemist of the Mint, appended to this Report,† gives the usual details of the metallurgical operations incidental to the coinage, and contains references to several points of scientific interest more or less intimately connected with the work of minting.

Among these may be mentioned the adjustment of blanks by electrolytic agency, to which attention has been directed in former Reports.‡ This process, originally advocated by Mr. Roberts, has already been employed on a large scale in the Indian Mints, and during the past year Mr. F. W. Peterson, one of the Assayers of the Calcutta Mint, who has devoted much attention to the subject, has visited this country for the purpose of obtaining the appliances necessary for bringing it into permanent use.

The question of the change in the density of a metal by annealing is one of some importance in the operations of coining. The experiments commenced in 1877 showed that the effect of

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* Appendix, page 33.

† Appendix, page 37.

‡ First Annual Report (1870), pages 42 and 110: Fifth Annual Report (1874), page 37.

even moderate temperatures was appreciable, and the results of their continuation are given by Mr. Roberts. In connection with this subject it is interesting to turn to such experiments of M. Tresca on the flow of solids as have special reference to Mint work, and to those which have been undertaken in this Mint on the flow of molten metals through capillary tubes. It is hoped that the latter may ultimately throw light on the phenomenon of liquation.

Mr. Roberts' Memorandum also contains a few notes on the indications afforded by the Paris Exhibition of progress in operations and appliances connected with coining, and briefly refers to two cases of counterfeit coining in which he was called upon to give scientific evidence. One of these is important, as it involved the question whether the fact that the "milling" of a coin has been tampered with constitutes the coin a "counterfeit" within the meaning of the Act 24 & 25 Vict. cap. 99. A person charged with this offence having been convicted under the Act, subject to the decision of the judges, the case was brought before the Court for Crown Cases Reserved, who decided, by a majority, that the coin was legally a counterfeit, and a point of much importance has thus been authoritatively settled.

The trial of the Pyx, held on the 10th of July last, at Goldsmiths' Hall, is remarkable as showing the singular uniformity of the composition of the gold coins taken for separate assay. I mentioned last year* that a continuous record is kept of the Mint assays of coin, and that the exact standard of a coinage, therefore, can at once be seen. This record showed that the fineness of the gold coins examined at the last trial of the Pyx was precisely standard, or 916·6, while the Pyx verdict proved the fineness of the five sovereigns and four half-sovereigns taken by the jury for individual assay to be 916·8, 916·8, 916·8, 916·8, 916·8, 916·5, 916·7, 916·8, and 916·6 respectively, or an average of 916·73. The average fineness of the silver coins separately assayed was 924·4. The amounts of gold and silver coin examined were 3,246,537*l.* and 365,904*l.* respectively. I append a copy of the verdict.†

During the year 1878 a gold coinage of 8,186,451*l.*, which had been in progress since October 1875, was brought to a conclusion. The value of the metal found to be actually deficient at the close of the coinage was 6,554*l.* 16*s.* 4*d.*, or 800*l.* 13*s.* 9*d.* per million, and the amount received from the sale of "sweep" was 2,104*l.* 11*s.* 3*d.* The actual loss to the Mint, therefore, was 4,450*l.* 5*s.* 1*d.*, or 543*l.* 12*s.* 2*d.* per million. The last occasion on which the waste on a gold coinage was calculated was in 1874, when, as stated in my Report for that year,‡ the net loss, after deducting the value of the "sweep" sold, amounted to 863*l.* 5*s.* 8*d.* per million. It will be seen, therefore, that a net reduction in the waste of 319*l.* 13*s.* 6*d.*

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* Eighth Annual Report (1877), page 16.
† Appendix, page 51.
‡ Fifth Annual Report (1874), page 20.

per million has been effected in the coinage last completed. A comparison of these results is interesting. The coinage completed in 1874 contained 950,075*l.*, or 65 per cent., and the coinage completed in 1878, 4,076,756*l.*, or 49 per cent., of light gold coin, which, as has been frequently explained, not only retains a certain amount of dirt, but is below the exact standard of fineness, though received as standard gold. Since the introduction of the present gold coinage in 1817, the coins have, by improvements in details of working, and closer attention to the conditions upon which accuracy of coining depends, been gradually brought nearer to the exact standard of fineness prescribed by law. It follows that the withdrawal of the older coins, which exhibit the greatest divergence from standard, has by degrees raised the mean fineness of the general mass of coins in circulation; and this elevation of standard is distinctly perceptible in those which are sent in to the Mint for re-coinage. As a difference of one ten-thousandth part above or below the precise standard represents a gain or loss to the Department of 100*l.* on a million, it is evident that the apparent gain on the last coinage is to be in some degree accounted for by the improved standard of the light gold. But it should be further observed that, as the proportion of light gold in the two coinages was as 65 to 49 per cent., it was to be expected that the waste on the former would be, as has proved to be the case, greater than on the latter.

A silver coinage of 614,394*l.* was completed before the 31st of March last, and no time has been lost in preparing the "sweep" for sale; but, as the amount to be sold is large, it was not in a condition to be "sampled," and tenders for its purchase had not therefore been invited, at the date of this Report.

Trial-plates for the Sheffield and Birmingham Assay Offices.

During the past year, new silver trial-plates, of the two different standards prescribed by the 25th section of the local Act 13 Geo. 3. cap. 52. were obtained by the Guardians of the Standard of Wrought Plate at Sheffield, the old plates having been gradually consumed in the work of the Office. The plates were of the fineness of 925 and 958 parts in a thousand respectively, and were prepared by Messrs. Johnson, Matthey, & Co., the Refiners, of Hatton Garden. After verification in this Department by Mr. Ridsdale, the Assayer charged with the annual examination of the "diet," or metal scraped from the gold and silver plate manufactured at Birmingham and Sheffield under the Act above mentioned, the plates were divided, as the Act directs, and one moiety of each was sent to the Sheffield Assay Office and the remaining moiety retained at the Mint.

Since the close of the year, four new gold trial-plates, of the fineness of 18, 15, 12, and 9 carats respectively, have also been verified for the Birmingham Assay Office, the first under the 31st section of the local Act 5 Geo. 4. cap. 52, regulating the office, and the remaining three under an Order in Council of the 22nd of December 1854, issued in accordance with the provisions of the Act 17 & 18 Vict. cap. 96, which authorised the manufacture of gold wares at lower standards than those before allowed by law.

Price of silver.

I subjoin, as in former reports, a table showing the average price of standard silver in the London market for every month in the past year :—

Month. (1878.)	Average price per ounce of standard silver in the London market.
	d.
January	$53\frac{3}{4}$
February	$54\frac{3}{8}$
March	$54\frac{3}{8}$
April	$54\frac{1}{16}$
May	$53\frac{7}{16}$
June	$53\frac{1}{8}$
July	$52\frac{5}{8}$
August	$52\frac{3}{8}$
September	$51\frac{11}{16}$
October	$50\frac{3}{8}$
November	$50\frac{9}{16}$
December	$50\frac{1}{8}$

These figures show the average price for the year to have been $52\frac{9}{16}d.$ as against $54\frac{3}{4}d.$ in 1877 and $53d.$ in 1876, so that the average price paid by the Mint for silver bullion for coinage, which, as already mentioned,* was $50\frac{1}{16}d.$, has been exceptionally low, and the profit upon the silver coinage proportionately high. Messrs. Mocatta and Goldsmid's circular for the year, which contains, as usual, a clear and succinct account of the movements of the precious metals to the 31st of December last, points out that the variations in the price of silver have, as in 1877, been very important, but that the average rate has been considerably lower. The highest price was obtained in February, when the passing of the "Silver Bill" in the United States enabled the German Government to effect large sales at prices ranging from $54d.$ to $55\frac{1}{4}d.$, but a reaction speedily occurred, on an increase in the amount of India Council bills, and from that time until the close of the year the price steadily declined, the quotation on the 31st of December having been $49\frac{5}{8}d.$ per ounce. One of the causes for this depression may be traced to a great falling off in the shipments to the East, hardly any purchases of importance having been made for that quarter during the second half of the year, and the total exports to India having declined from $12\frac{1}{2}$ millions in 1877 to $3\frac{1}{4}$ millions in 1878. The circular adds that the depression would doubtless have been much greater but for a large, and almost continuous, Austrian demand, which absorbed the greater part of the arrivals after September, and enabled the German Government to make further sales. The total imports from all quarters during the year amounted to about 11 millions, as against 20 millions in 1877 and 13 millions in 1876. The exports were $11\frac{1}{4}$ millions, as against 19 millions in 1877 and 14 millions in the previous year. It is worthy of notice that the imports from America

* Page 10.

were under 1½ millions, and that but little more than one million has been shipped from this country to the United States, showing a balance of less than half a million, and confirming the opinion mentioned in my last Report* as having been expressed in the circular for 1877, that there was no reason to anticipate any great increase of the American supply. The rates at which the bills of the Indian Government have been allotted during the year have varied from 1*s.* 9*d.* in February to 1*s.* 6¾*d.* per rupee in December, and the loss thus entailed upon the Indian Exchequer has been about 3,000,000*l.*

The average price of standard silver in London during the past four months has been:—

Month. (1879.)	Average price.
	d.
January	50 1/16
February	49 7/8
March	49½
April	49¾

or rather lower than the price in December.

Sydney Mint.

The Annual Report of the Deputy Master of the Mint at Sydney will be found, as usual, in the Appendix.† It shows that the production of gold in New South Wales and the imports from Queensland having considerably decreased, the receipts of gold for coinage during the year have only been 1,308,898*l.*, as against 1,608,248*l.* in 1877. The amount of coin issued, therefore, 1,322,000*l.*, consisting of 1,259,000*l.* in sovereigns and 63,000*l.* in half-sovereigns, was less than in the preceding year, when the issues of coin reached a total of 1,590,000*l.*, all in sovereigns. On the death of the late "Senior Clerk and Coiner" in April last, the Deputy Master recommended the abolition of that office, and a redistribution of the duties of the Mint, by which a considerable saving would be effected, and their Lordships were pleased to approve of his recommendations. He has now reported that the arrangements then sanctioned have been found to work satisfactorily, and have tended to increase the efficiency of the Department. The Report also contains details of several changes and improvements in the operations of minting, to which I need not further refer, but which possess much interest, and have no doubt been attended with great advantage.

I have elsewhere‡ alluded to the arrangements, of which their Lordships have approved, for the shipment of silver coin to the Sydney Mint, to be issued for circulation by that Branch. On receipt of their Lordships' instructions of the 23rd of January last, directions were sent to Mr. Hunt to apply for such an amount of coin as he might require, and to make regulations, with the concurrence of the Governor of New South Wales, for its issue;

* Eighth Annual Report (1877), page 18.
† Appendix, page 52.
‡ Page 9.

and a telegram has since been received from him applying for a consignment of the nominal value of 50,000*l.* in silver coin of different denominations, which was duly shipped to Sydney in the course of the month of April 1879.

I may add that during the year 1878 bronze coin of the nominal value of 500*l.* was sent to the Sydney Mint, under the arrangements already in force, to meet the requirements of the Colony.

Melbourne Mint.

I append* the Annual Report of the Deputy Master of the Mint at Melbourne.

The coinage during the year was 2,171,000*l.*, all in sovereigns, having been larger than that of any year since the establishment of the Branch, and having exceeded that of 1877 by 644,000*l.*, and that of 1876 by 47,000*l.*, notwithstanding that the production of gold in Victoria is gradually decreasing. Mr. Broughton expresses a hope that the new regulations for the receipt of gold and issue of coin, made in October last, of which a copy is appended to his Report, will tend to increase the work of the Mint. Sub-reports from the officers in charge of the Melting and Refining Department and the Coining Department give details of improvements and modifications of practice which experience has led them to adopt, and bear strong testimony to the advantages accruing from the ability of the Mint, in a country where skilled labour is difficult to obtain, itself to undertake such important and delicate alterations of machinery as may become necessary or desirable. In the month of April Mr. Broughton proposed a scheme for the re-organisation of the superior establishment of his Department, which was in due course submitted for their Lordships' consideration, and formed the subject of their order of the 19th of September last. By that order their Lordships were pleased to approve of the promotion of Mr. F. B. Miller, First Clerk of the Bullion Office, to the appointment of Superintendent of the Bullion Office, rendered vacant by the transfer of Mr. Hunt to the Deputy Mastership at Sydney; of a reduction in the salary and position of the First Clerkship of the Bullion Office on the concentration in the hands of the Superintendent of the duties of supervising the Bullion Office, the Melting and Refining Departments, and the Coining Department; and of constituting the Registrar and Accountant one of the five Principal Officers, in place of the Superintendent of the Coining Department, whose office was abolished in 1875. Their Lordships were further pleased to give directions for the preparation of the necessary Treasury Warrant appointing Mr. E. S. Wardell, the present Registrar and Accountant, to be a Principal Officer, and to sanction certain increases of salary and re-arrangements of duties which Mr. Broughton had recommended. By these changes a considerable reduction has been effected in the expenditure of the Department.

* Appendix, page 56.

I need not again refer to the representations made by Mr. Broughton as to the state of the silver coinage in Victoria, nor to the decision at which their Lordships have arrived to permit silver as well as bronze coin to be sent out to the Branch Mints at Sydney and Melbourne for issue to the public. The arrangements authorised have already been described.* I should mention, however, that instructions having been sent to Melbourne, as to Sydney, authorising the Deputy Master to make application for such an amount of silver coin as he might consider necessary, a telegram has been received from Mr. Broughton, as from Mr. Hunt, requesting the shipment of 50,000*l.* in different denominations, and that the coin required has been shipped with the consignment forwarded to Sydney.

A sum of 2,000*l.* in bronze coin was, as already stated, shipped to Melbourne during the year, for issue by the Mint.

It was mentioned in my Report for 1872 † that arrangements had been made for filling up Junior Clerkships in the Branch Mints by means of competitive examinations held under the directions of the Universities of Sydney and Melbourne. A modification has, at the instance of the Deputy Master, been introduced into the system adopted at Melbourne, under which the competition for vacant Clerkships in the Mint had till last year formed part of the ordinary matriculation examination of the University. On the occurrence of a vacancy in June last, Mr. Broughton, being of opinion that these appointments should be open to more general competition and that the range of subjects in which candidates are examined should be wider, made arrangements with the authorities of the University for holding a special examination, and, with the approval of the Governor of Victoria, gave public notice that such an examination would be held on the 9th of December. A copy of Mr. Broughton's correspondence with Sir George Bowen and with the University authorities, which he had forwarded to the Master of the Mint, having been submitted for their Lordships' consideration, my Lords were pleased, while suggesting certain alterations in the details of future examinations, to approve of the arrangements made, and the vacant Clerkship, with a second vacancy which had meanwhile occurred, was filled up by means of the competition held in December.

Coinages of foreign countries.

United States.

I regret to have to record the death of Dr. H. R. Linderman, Director of the United States Mint, which has taken place since the issue of his Annual Report for the fiscal year ended the 30th of June 1878, under date of the 1st of November last. In Dr. Linderman the American Government have lost a valuable officer, who has since 1873 exercised, with great ability, the supreme control over all the Mints and Assay Offices of the United States, and has largely contributed both by his writings,

* Page 9.
† Third Annual Report (1872), page 18.

and by official reports, to a more extended knowledge of the principles upon which coinage and currency should be based.

The United States coinage of the year 1877–78 consisted of 56,118,382 pieces, as against 85,968,992 pieces in the previous year, a reduction having taken place in the number of the silver fractional coins struck, which was only 30,000,000, as against 70,000,000 in 1876–77. The standard silver dollars coined before the close of the year amounted to 8,500,000, and the trade-dollars to 11,378,000, as against 9,162,000 in the previous year.

With regard to the latter coin, Dr. Linderman reported that—

"So long as gold continued at a premium, and silver bullion commanded a price sufficient to keep the bullion value of 420 grains of standard silver, together with the coinage charge for a trade-dollar, above the gold value of a United States legal-tender dollar note, there was no likelihood of trade-dollars finding their way into domestic circulation, at least not to any embarrassing extent;"

but that

"when, from the appreciation of United States notes as compared with gold, and the decline in the value of silver, a trade-dollar added to its coinage charge became of less intrinsic value than the gold value of a dollar note, owners of silver bullion deposited the same at the Mints for returns in trade-dollars, and placed them in circulation at a profit to themselves."

In consequence of this state of affairs the Secretary of the Treasury directed, in October 1877, that the receipt of silver for coinage into trade-dollars should be discontinued; and, although this order was relaxed in the following month owing to an increased demand for coin on the Pacific coast for export, as was alleged, to China, it transpired that a certain number of the dollars coined were not shipped to China but put into home circulation, and it became necessary, on the 22nd of February 1878, to issue a second order, directing that the receipt of silver bullion for coinage into trade-dollars should be entirely discontinued. When, therefore, the bullion already deposited had been converted into coin, upon satisfactory evidence that the dollars struck from it would be exported, the coinage of trade-dollars entirely ceased, and none were issued from the Mints after April 1878. In his Report for 1876–77, Dr. Linderman had said:—

"There are weighty reasons why the trade-dollar should not be coined for domestic circulation, but it is hardly worth while to discuss them here, since the law provides very clearly that they shall be coined only to meet the export demand, and leaves no discretion as to their coinage for any other purpose."

It would appear doubtful, therefore, whether the coinage of trade-dollars will be resumed, so long as the price of silver remains low, and they can be put into home circulation at a profit to the depositor of bullion.

The Report for 1877–78 mentions that an arrangement has been made by which the United States Government undertake to purchase all gold bullion deposited at the Mint at Denver, and the Assay Office at Charlotte, North Carolina, paying for it its coining value in legal tender notes at par, or in standard silver dollars, at the option of the seller, and charging the latter with

the expenses of melting, assaying, and refining, and also of conveying the bullion to the Mint at Philadelphia, for coinage on Government account. This arrangement, which offers the miner the advantage of exchanging his bullion at once for current money, will be extended to the Assay Offices at Helena, Montana, and Boise City, Idaho, whenever safe means can be secured of transporting the bullion from those Territories to the coinage Mints. A statement is also given of the amount of gold and silver produced in the United States during the last fiscal year, in which the value of the gold is estimated at $47,226,107, and that of silver at $46,726,314. This estimate, however, is stated by the United States "Economist" to be excessive, the out-turn of gold and silver for the year 1878 having, according to that authority, not exceeded $36,000,000 of each metal.*

It is to be noted that during the year 1878 specie payments were practically resumed in the United States, the value of the legal tender note having on the 17th of December last risen to a par with gold. The contemplated arrangement, therefore, for the legal resumption of specie payments on the 1st of January 1879 was carried into effect without difficulty. It is to be remarked at the same time that the re-constitution of the silver dollar as a standard of value has not contributed in any material degree to this result, as is shown by the fact that, according to recent returns, out of a total coinage of 5,755,000*l.* in silver dollars since the passing of the Bland Act, there remained in the Treasury on the 1st of April 1879 no less than 4,312,000*l.* The total issue, therefore, has only amounted to 1,413,000*l.*†

International Monetary Conference.

I described in my last Report‡ the successive changes which have been made in the coinage of the United States since its first establishment in 1792, and the position which that country assumed in February 1878, by re-establishing the silver dollar of 412½ grains as one of its units of value, and thus recurring to the double standard of gold and silver. I also mentioned the provision made in the Act of Congress of the 28th of that month, for the appointment of three Commissioners to confer with European Powers, with the view of "establishing internationally the use of "bi-metallic money and securing fixity of relative value" between gold and silver in coinage. It was evident, as I ventured to point out in the same Report, that the United States would be likely to find difficulties in arriving at an agreement of this description even with such countries as might still be disposed to consider the question of the adoption or maintenance of a double standard an open one; and, so far as this country was concerned, their Lordships caused it to be intimated to the United States Government, in reply to their invitation to the Conference, that, as gold had been for more than sixty years the standard of value in the United Kingdom, and the system of the single standard had approved

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* See "Economist," 26th April 1879, page 475.
† See "Economist," 19th April 1879, page 446.
‡ Eighth Annual Report (1877,) page 28.

itself both to successive Governments and to the people by long experience, the question was not an open one, and that it would hardly be consistent with the respect due to a friendly Government if Her Majesty's Government were to enter the Conference on the conditions proposed. As, however, the Secretary of State for India in Council subsequently expressed a wish that, considering the important bearing of the question upon the interests of India, the Government should decide to take part in the Conference, their Lordships consented that this country should be represented, provided that the subject of the standards of currency used in various countries, and the relations between them, should be freely discussed; and, the Government of the United States having accepted these conditions, their Lordships requested Mr. Goschen, Mr. Gibbs, late Governor of the Bank of England, and Sir Thomas Seccombe, Financial Secretary of the India Office, to represent Her Majesty's Government at the Conference, which met at Paris in August last.

I could not pretend, within the limits of this Report, to give a complete account of the discussions of the Conference, nor is it necessary that I should do so, full details having been published in the Reports addressed by the delegates to their respective Governments, and in the procès-verbaux drawn up by the Secretaries of the Conference, and issued under the directions of the French Ministry of Foreign Affairs. It may be as well, however, that I should show, in a few words, the form which the deliberations assumed under the presidency of M. Léon Say, the French Minister of Finance, and the resolutions which were finally adopted.

The following propositions were in the first instance put forward, after some hesitation, by the United States Commissioners:—

"1. It is the opinion of this assembly that it is not to be desired that silver should be excluded from free coinage in Europe, and the United States of America. On the contrary, the assembly believes that it is desirable that the unrestricted coinage of silver, and its use as money of unlimited legal tender, should be retained where they exist, and, as far as practicable, restored where they have ceased to exist.

"2. The use of both gold and silver as unlimited legal tender money may be safely adopted:—

"First. By equalising them at a relation to be fixed by international agreement.

"Secondly. By granting to each metal, at the relation fixed, equal terms of coinage, making no discrimination between them."

In answer to these propositions the following resolutions were drawn up, and presented to the Conference by the President:—

"The Conference wish to express their sincere thanks to the Government of the United States of America for having procured an international exchange of opinion upon a subject of so much importance as the monetary question.

"Having maturely considered the proposals of the delegates of the United States, the Conference recognises:—

"1. That it is necessary to maintain in the world the monetary functions of silver, as well as those of gold, but that the selection for use of one or the other of these two metals, or of both simultaneously, should be governed by the special situation of each State or group of States.

"2. That the question of the restriction of the mintage of silver should equally be left to the discretion of each State or group of States, according to the particular position in which they may be placed; and the more, in that the disturbance which in recent years has been produced in the silver market has variously affected the monetary situation of the several countries.

"3. That the differences of opinion which have appeared, and the fact that even the States in which the double standard exists find it impossible to enter into any engagement with regard to the unlimited coinage of silver, preclude the discussion of the question of establishing an international relation of value between the two metals."

After considerable opposition on the part of the Italian delegates, who were anxious to place upon record their opinions in favour of the double standard, and of the adoption of an international ratio between gold and silver, these resolutions were agreed to by a large majority, and at the same time Mr. Goschen made a declaration that he and his colleagues, "while not in "favour of the universal adoption of a single gold standard, "considered that the establishment of a fixed ratio of gold and "silver was utterly impracticable, and that they were opposed to "a system of currency based upon a double standard."

A copy of the report of the English delegates will be found in the Appendix.*

The seventh Memorandum on the operations of the German Coinage Laws,† for the year 1878, presented to the Reichsrath by the Imperial Treasury on the 15th of February last, gives a full account of the progress made during the year in the withdrawal of the old silver and copper coinages from circulation, and in the arrangements for the issue of the new Imperial coins. Germany.

All the subsidiary silver coins of the old system, consisting principally of one-sixth thaler pieces, and all the old pfennig pieces, with their multiples, have been withdrawn during the year. Of all the old coins of the country, therefore, the one-thaler piece alone remains in circulation, and much progress has also been made during the year in the withdrawal of this coin, as will be seen by the following table of the amounts of the different coinages withdrawn:—

	£
Thalers	3,777,959
Other silver coins	1,577,801
Copper coins	11,987
Total	5,367,747

The Memorandum contains an interesting statement comparing the amount of the old coins withdrawn with the issues of new Imperial coin. From this statement it appears that, while the withdrawals of gold coin have only amounted to 4,547,424*l.*, and the issues on Government account alone have reached 83,634,954*l.*,

* *Appendix, page 63.*

† Siebente Denkschrift über die Ausführung der Münzgesetzgebung (II. Session 1879).

the withdrawals of large silver coin have been 48,683,939*l.*, and the issues only 19,569,567*l.* The issues of Imperial coin in place of the small coins of the old system have at the same time been smaller than the amount of the corresponding old coin in circulation by 120,330*l.* The total value of the superior gold and silver coins issued, however, has exceeded that of the withdrawals by no less than 49,973,158*l.*, and a larger total amount of coinage, therefore, has been brought into circulation by the issue of the new gold coin alone than was before represented by the gold and larger silver pieces of the old system combined.

As regards the withdrawal of the thaler pieces, the Memorandum states that those coined between the years 1750 and 1822, inclusive, have since 1873 been withdrawn from circulation by the public treasuries of the Empire, and by those of the States which formerly possessed the thaler currency, and since the middle of 1878 by the public treasuries of the South German States, and are forwarded to the Mints to be refined, while those coined since 1822 are withdrawn from the Imperial Bank, as may be necessary from time to time, for re-coinage. From a table showing the issues of thalers for successive periods, and the amounts which have been withdrawn from circulation since the establishment of the new coinage, it appears that the total number of thalers remaining in circulation at the close of 1878 was 200,113,992, or converting the amount into sterling at three shillings per thaler, 30,017,099*l.*, but it is probable, as pointed out in the Memorandum, that this sum is considerably in excess of the amount still actually current, as it is impossible to say how much of it may have been melted down, or lost, or have otherwise disappeared from circulation. Some indication, however, of the probable amount of thalers still to be withdrawn may be found in the results of the withdrawal of other large silver pieces. The two-florin, one-florin, and half-thaler pieces have already been called in, and the amounts withdrawn were found to be less by 31, 20, and 17 per cent. respectively, or on an average by 20 per cent., than the amounts originally issued. If this per-centage is applied to the thaler circulation, the number still to be withdrawn would be reduced to 117,051,000 thalers, or 17,557,650*l.* This statement no doubt gives the last official opinion as to the amount of silver remaining to be disposed of by the German Government, but, as pointed out in the Memorandum, a very small change in the per-centage of pieces lost, &c. would make a very large difference in the number of thalers still to be withdrawn, and but little reliance, therefore, can be placed on the estimate.

The total amount of Imperial gold coin struck to the end of 1878 was 101,305,291*l.*, including 17,662,301*l.* coined on private account; and the total profit realised by the State on the gold coinage to the same date was 411,569*l.* The Memorandum also describes in detail the arrangements made for the purchase of gold by the Imperial Bank, and shows that the total amount purchased during the three years from 1876 to 1878 inclusive has been 16,061,468*l.*, of which 14,026,878*l.* consisted of bars and 2,034,590*l.* of coin of other countries.

The coinage of Imperial silver pieces has now been suspended, the amount coined having reached the limit fixed by the Coinage Law of the 9th of July 1873, namely, ten marks per head for the population of the Empire. The total amount of silver coins struck has been:—

	£
Five-mark pieces - -	3,582,654
Two-mark pieces - -	4,925,502
Marks - - - -	7,487,164
Fifty-pfennig pieces - -	3,574,328
Twenty-pfennig pieces - -	1,785,896
	21,355,544

and the gross profit upon their coinage has been 2,080,943*l.*

The coinage of nickel and bronze pieces was brought to a conclusion in 1877. It amounted to 2,237,813*l.*, of which 1,758,017*l.* were nickel and 479,796*l.* bronze coins.

The sales of silver bars produced from old silver coins withdrawn from circulation were less important in 1878 than in the previous year, in consequence of the diminished demand for the East; but on the 31st of December 1878 they had reached a total of 6,727,151·281 German pounds, equal to about 108,138,956 ounces troy. The loss on the sale of this amount of silver is set down as 4,474,203*l.*

France, Belgium, Italy, Switzerland, and Greece.

The year 1878 has been an important one for the States forming the so-called Latin Union. On the 23rd of December 1865 the Governments of France, Belgium, Italy, and Switzerland entered into a Convention for the establishment of an international system of coinage, under which the gold and silver standard coins of each country were made current throughout the territories of the Union, and circulation was also given to the silver token coins of the several States to an amount not exceeding six francs per head of the population of each. In 1868 the number of States forming the Union was increased to five by the admission of Greece. It became necessary under the terms of this Convention that the question of its renewal, after the expiration of the first 14 years of its existence, should be decided before the close of the year 1878, and by agreement among the contracting powers, therefore, a Conference was held in Paris in the autumn of last year. Its first meeting for discussion was held on the 1st of October, under the presidency of M. Léon Say, French Minister of Finance, and on the 5th of November a fresh Convention was signed by the Plenipotentiaries of the respective Governments, prolonging the Union for a further period of six years from the 1st of January 1880, and introducing such modifications into the terms of the agreement as circumstances appeared to render necessary.

The changes made in the arrangements of 1865 may be briefly stated. The remedy of fineness for gold coins is reduced from

two to one per mille, the perfection to which the coinage of gold has been brought rendering the larger remedy unnecessary. The coinage of gold five-franc pieces is suspended, the large surface which they present in comparison with their size causing them to lose weight rapidly. The coinage of silver five-franc pieces, the only standard silver coin, is also suspended, and cannot be resumed until an agreement to that effect has been unanimously adopted by the contracting States. The amount of silver token coins, namely, pieces of two francs, one franc, 50 centimes, and 20 centimes, which may be issued by each country at the rate of six francs per head of its population, is fixed, according to the most recent census returns, as follows:—

	Francs.
Belgium - - -	33,000,000
France and Algeria -	240,000,000
Greece - - -	10,500,000
Italy - - -	170,000,000
Switzerland - -	18,000,000

These figures include the amounts already issued.

The Italian Government having declared its wish to withdraw from circulation its paper currency below five francs, the other contracting States undertake no longer to receive Italian silver token coins in payment, but to make arrangements for withdrawing them from circulation and sending them back to Italy. A separate instrument for carrying this agreement into effect is attached to the Convention.

A declaration is also attached to the Convention respecting the coinage of silver for the year 1879, by which the Governments of Belgium, France, Greece, and Switzerland engage themselves not to coin, nor allow to be coined, any five-franc pieces, nor to deliver any "bons de monnaie" for the coinage of silver, during the year. The Italian Government, on the other hand, is authorised, as an exceptional measure, to coin a sum of 20,000,000 francs in silver five-franc pieces, in order to facilitate the operation, mentioned above, of replacing its present fractional paper currency by token coins brought back from the other countries of the Union.

The Convention will remain in force till the 1st of January 1886, and, if not "denounced" before that date, will be considered to be renewed from year to year by tacit agreement.

I append* copies of the Convention, and of the supplementary agreements above mentioned. The procès-verbaux of the Conference, and the reports made to the Chambers of the different States on the bills presented to them for ratifying the Convention, are full of interest, and contain much information of value respecting matters connected with the coinage of the countries forming the Union.

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* Appendix, page 74.

The coins struck in France during the year 1878 were the following:—

Denomination.	Francs.		£	£
Gold - One hundred francs -	1,281,400	or	51,256	
„ - Fifty francs - -	264,700	„	10,588	
„ - Twenty francs	183,772,000	„	7,350,880	
				7,412,724
Silver Five francs - -	1,821,420	„	72,856	72,856
Bronze Ten centimes -	25,000	„	1,000	
„ Five centimes -	23,300	„	932	
„ Two centimes -	22,250	„	890	
„ One centime -	17,889	„	715	3,537
Francs	187,227,959	or		£7,489,117

From this statement it will be seen that the coinage of gold has been 7,412,724*l.*, as against 10,873,717*l.* in 1877. It may be mentioned that 100-franc and 50-franc pieces of the design of the Republic have been issued for the first time during the past year, and that the Paris Mint has, besides the gold coins mentioned above, struck 20-franc pieces of the value of 500,000 francs, bearing the effigy of the reigning Prince of Monaco. The silver five-franc pieces issued by the French Mint in 1878 were coined, as were those issued in 1877, from bullion sent in before the passing of the law of the 5th of August 1876, authorising the Government to limit or suspend the coinage of these pieces. In Italy the whole amount of silver five-franc pieces authorised to be issued during the year,* 9,000,000 francs, was struck on behalf of the Government.

Spain.

No final steps have been taken to carry into effect the changes in the Spanish monetary system prescribed by the decrees of the 19th of October, 1868, of which translations were appended to my Report for 1870,† and by which the peseta, or franc, was constituted the standard of value, and the coinage generally assimilated to that of the "Latin" Union. The date from which these decrees were to take effect was fixed as the 1st of January 1871, but their execution was subsequently postponed till the 1st of January 1872, and their provisions were not in fact put in force except so far as the subsidiary coins were concerned, the superior pieces of the old coinage being still allowed to remain in circulation. A movement had in the meanwhile arisen in favour of adopting the conclusions arrived at by the Monetary Conference of 1867, that is to say, the single gold standard, and the coinage of a 25-peseta piece, destined to replace the 20-peseta piece introduced into the Spanish monetary system by the decree of 1868, was prescribed by a decree of the 21st of March 1871. The execution of this decree was, however, suspended by a Royal

* See Eighth Annual Report (1877), page 31.
† First Annual Report (1870), page 117.

Order of the 15th of September in the same year, and the 25-peseta piece was not actually coined until 1876, as shown in my Report for that year.* At the same time provision was ordered to be made for a constant supply of gold for coinage, and it was decreed that, when a sufficient quantity of gold had been put into circulation, all silver coins should be reduced to the position of auxiliary pieces, and should only be legal tender for sums not exceeding 150 pesetas. This decree, therefore, was a first step towards the introduction of the single gold standard, but a decree of the 30th of August 1877 again favoured the coinage of silver, by admitting to the Mint gold and silver ingots in amounts of the proportionate weights of 1 to 15½, while silver from Spanish mines was admitted without restriction. The latter decree only remained in force until the 25th of March 1878, when it was suspended by Royal Order, though probably only for the reason that at that date the stock of silver bullion in the Mint amounted to 25 million pesetas, and that it was thought undesirable to increase it. Lastly, the coinage of a 10-peseta piece in Spain, mentioned in my Report for 1877,† appears to show a tendency on the part of the Government to persevere in its practical adhesion to the system of the "Latin" Union.‡

Holland.

I have in former Reports given a brief account of the successive proposals made by the Dutch Government in reference to the monetary question, and of the arrangement made in 1875 for its provisional settlement, under which the coinage of standard silver pieces on private account has been entirely suspended. On the 9th of December 1877, as shown in my Report for that year,§ another law was passed, postponing indefinitely the revision of this provisional measure, and since that date no fresh legislation on the subject of the coinage has taken place.

The gold coinage of the Netherlands for the year 1878 has been insignificant in amount, owing to the high rate of exchange which has ruled between Holland and the countries possessing a gold standard, and which has not admitted of the importation of gold for coinage at a profit to the importer. The substitution of bronze for copper coin has continued during the year, as will be seen by the following statement of the work performed by the Mint at Utrecht to the 31st of December last:—

Denomination.		No. of Pieces.
Gold	Ducats (5·75 florins)	87,310
Silver (subsidiary coinage)	Ten-cents	1,000,000
Bronze (do.)	One-cent	53,900,000
	Half-cent	4,000,000

* Seventh Annual Report (1876), page 30.

† Eighth Annual Report (1877), page 33.

‡ The successive changes in the coinage arrangements of Spain since 1848 are clearly described in an able pamphlet by M. Joseph de Parieu, reprinted from the "Journal des Économistes," and entitled: "Système Monétaire Espagnol dans ses rapports avec l'Union Latine." (Paris, 1879.)

§ Eighth Annual Report (1877), page 32.

Since the beginning of the present year a certain amount of gold coinage has been executed, and a further issue has been made by the Government of subsidiary silver coins.

Servia.

By a law of the 10th of December last the National Assembly of Servia adopted the monetary system of the "Latin" Union as the basis of the coinage of the Principality, the piece corresponding to the franc being styled a dinar, and that corresponding to the centime a para. In two points only the Servian law differs from those of the Convention of the 23rd of December 1865, namely, in the provisions that the right of causing money to be coined is reserved exclusively to the State, the amount and denominations of coins to be struck being determined by the Legislature on the initiative of the Minister of Finance, and that when the gold pieces have been struck and put into circulation, the five-dinar silver piece is not to be legal tender for sums exceeding 500 dinars, so that this piece will cease to be a standard coin. The Government is authorised at once to coin and issue a sum of 14,800,000 dinars, consisting of 10,000,000 dinars in gold pieces, 1,000,000 in silver five-dinar pieces, 2,600,000 in subsidiary silver coins, and 1,200,000 in bronze pieces of 10 and 5 paras. It is further provided that a special Convention shall be made with the States having the same coinage as Servia, regulating the conditions under which the coins of Servia and of those States shall be reciprocally received, and that meanwhile a ukase shall be issued fixing the rates at which foreign coins will be received by the public departments.

Japan Mint.

The Report of the Imperial Commissioner of the Mint at Osaka for the year ended the 30th of June 1878, shows that the coinage executed during the year consisted almost entirely of silver and copper token coins, the number of gold pieces struck having been only 71,000, and that of trade-dollars only 436,000, out of a total of 116,000,000. Since the issue of the Report the Japanese Government have, by proclamation of the 26th of November 1878, suspended the coinage of the trade-dollar of 420 grains, which had in the preceding month of May been made current throughout Japan, and have directed that the coinage of the yen, or dollar of 416 grains originally issued, should be resumed. The reasons for this change are not given in the proclamation, and are not at first sight apparent; but it is probable that they are to be found in the fact that the Japanese trade-dollar has generally not been received in commercial transactions at a higher rate than the Mexican dollar of 416 grains, and that, in view of the suspension of the coinage of American trade-dollars of 420 grains, it has been thought desirable to revert to the lighter coin.

It is to be observed that during the year 1877–78 the Japan Mint lost the services of two European officers on the expiration of their appointments, one of them being Mr. Edward Dillon, late an Assistant Assayer in this Department, who for more than five years held offices of Assayer, Superintendent of the Melting Department, and Technical Adviser to the Commissioner, with

great advantage to the establishment. Only two Europeans now remain in the Mint, namely, Mr. Gowland, as Chemist, Assayer, and Technical Adviser, and Mr. MacLagan, as Engineer.

New site for the Mint.

The negotiations into which the First Commissioner of Works has been authorised by their Lordships to enter with the Corporation of the City of London, with a view to the acquisition of a new site for the Mint on the Victoria Embankment at Whitefriars, not having as yet been brought to a conclusion, the question of the steps to be taken for placing the Department upon a proper footing and enabling it adequately to meet the claims upon it, is still in abeyance. I do not propose again to dwell upon the insufficiency and obsolete nature of the machinery of the present Mint, to which attention has been called in many former Reports, nor need I urge upon their Lordships the necessity, which they have uniformly recognised, of putting an end to the difficulties by which the Department has for many years been surrounded, and which have so greatly impaired its efficiency.

I have the honour to be,
Sir,
Your obedient Servant,
C. W. FREMANTLE,
Deputy Master of the Mint.

The Secretary,
Treasury.

Royal Mint, 10*th May* 1879.

APPENDIX.

No. I.

MEMORANDUM BY MR. HILL, SUPERINTENDENT OF THE OPERATIVE DEPARTMENT.

MELTING HOUSE.

Only 1,182,002 ounces, or about 36¼ tons of gold, which is considerably less than the average amount, have been melted and cast into bars for coinage during the year. In addition to this amount 108,923 ounces, being the balance of gold in the Mint at the conclusion of the coinage, were cast into ingots to be returned to the Bank of England.

The weight of silver melted during the year was 5,061,383 ounces, or about 155 tons. Of this amount, 1,284,392 ounces consisted of worn coin withdrawn from circulation in England, Scotland, Ireland, and the colonies; 783,876 ounces of silver purchased for coinage; and 2,993,115 ounces of scissel, rejected coin, &c.

During the year the gold and silver sweep which had accumulated was subjected to mechanical treatment, the metal recovered was brought to account, and the residue sold by tender in the usual manner.

Towards the end of the year it became necessary to increase the stock of bronze coin, and 51 tons of this metal were melted and cast into bars for coinage.

COINING DEPARTMENT.

The work in this Department has been very satisfactorily performed throughout the year, and without any serious derangement of machinery. The weight of the gold coinage of 8,186,451*l.* which was commenced in October 1875, and completed in June 1878, was within 2¼ ounces of the actual legal standard, and showed the fidelity with which the work in this Department is conducted. I would remark that this variation from standard amounts to less than 10*l.*

It is also highly satisfactory to state that the loss on the above coinage, including the loss upon the re-coinage of light gold coin, has been very small, the actual loss per million sterling having been 543*l.* 11*s.* 8*d.*,

whereas the loss on the previous coinage was at the rate of 863*l.* 5*s.* 8*d.* per million.

In the Annealing Room various experiments have been made with different sizes and shapes of the plumbago annealing-pots introduced in 1877 during the progress of the gold coinage, with a view to adopt them for the annealing of silver and bronze blanks. It was found that the pots used for gold blanks are not suited for blanks of the other metals, but a suitable size has now been decided upon. In using these pots for silver and bronze, a loose lining either of copper or thin iron is required, as silver and bronze oxidise more quickly than gold blanks. By means of this lining all air is excluded, and oxidation is prevented.

An alteration has been made in the width of the bronze bars, so that by a re-arrangement of the cutters any denomination of bronze blanks may be cut from the same width of fillet.

Machinery Department.

The machinery has been kept in fair working order during the past year, but the Artificers have been called upon, on several occasions, to work all night to repair or renew some part of the machinery which had become unserviceable during the day. The 40 and 20 horse-power engines were thoroughly examined, and were repaired as far as time allowed; the six horse-power engine was taken to pieces, examined, and put into good working order, and the boilers have been cleaned and repaired where necessary. In addition to the above repairs to engines, a new 10-ton steam-hammer has been fixed in the Smiths' shop. This hammer has been used for forging dies, &c., and has been found very effective. A new boiler, supplied at the same time, has also been connected with the six horse-power engine; the necessary connexions and fittings have been made, and, together with the hammer and boiler, have been placed in position and fixed by the Mint Artificers. One set of new moulds for shilling bars has been prepared, planed, and fitted, together with two new sets of moulds for casting bronze bars.

The main water-tank which supplies the various buildings was examined during the year, and the tie-rods, bolts, &c. were found to be in bad condition, and to require renewal. This renewal was effected, and the tank placed in a thorough state of repair.

Die Department.

This Department has during the past year prepared 3,732 matrices, punches, and dies of various descriptions, including dies for the silver and bronze coinages for Mauritius, 210 sovereign dies for the Melbourne Mint, 215 dies for the Sydney Mint, two medal reverse punches, and four medal dies. Of the above-mentioned dies, 372 were worn dies resunk, and again finished for coining.

The Department has also produced during the year the usual medals for the University of London and the Royal Society, including the new Davy medal; the gold and silver medals presented by the Foreign Office as rewards for assistance rendered in cases of shipwreck abroad; and 1,650 war medals for the Army and Navy. 7,057 bars and 209 clasps were made, and 4,945 bars and clasps were affixed to medals.

I append the usual statement of the number of coins struck during the year 1878, and of the number of dies used for the Imperial coinage during the years 1876, 1877, and 1878 respectively.

ROBERT A. HILL,
Superintendent of the Operative Department.

Royal Mint,
18th March 1879.

STATEMENT of the Number of Coins struck at the Royal Mint during the Year 1878.

Denomination.	Number.	Nominal Value.		
		£	s.	d.
IMPERIAL:—				
Gold: Sovereigns	1,091,275	1,091,275	0	0
„ Half Sovereigns	2,081,941	1,040,970	10	0
Silver: Half Crowns	1,466,323	183,290	7	6
„ Florins	1,786,680	178,668	0	0
„ Shillings	3,127,131	156,356	11	0
„ Sixpences	2,624,525	65,613	2	6
„ Fourpences (Maundy money only)	5,735	95	11	8
„ Threepences	2,424,463	30,305	15	9
„ Twopences (Maundy money only)	6,709	55	18	2
„ Pence (Maundy money only)	9,903	41	5	3
Bronze: Pence	2,764,470	11,518	12	6
„ Halfpence	1,425,535	2,969	17	3½
„ Farthings	4,008,540	4,175	11	3
MAURITIUS:—				
Silver: Twenty Cents	25,000	458	6	8
„ Ten Cents	50,000	458	6	8
Bronze: Five Cents	50,000	229	3	4
„ Two Cents	125,000	229	3	4
„ Cents	250,000	229	3	4
STRAITS SETTLEMENTS:—				
Silver: Twenty Cents	150,000	6,250	0	0
„ Ten Cents	470,000	9,791	13	4
„ Five Cents	260,000	2,708	6	8
MALTA:—				
Bronze: One-third Farthings	288,000	100	0	0
	24,491,230	2,785,790	6	2½

STATEMENT of the Number and Denominations of Pieces coined, with the Number of Dies used in their production, during the Years 1876, 1877, and 1878.

Denomination of Coin.	1876.			1877.			1878.		
	Number of Pieces coined.	Number of Dies used.	Number of Pieces struck per Pair of Dies.	Number of Pieces coined.	Number of Dies used.	Number of Pieces struck per Pair of Dies.	Number of Pieces coined.	Number of Dies used.	Number of Pieces struck per Pair of Dies.
Sovereigns	4,943,347	272 + 350	15,895	—	—	—	1,517,786	70 + 69	21,839
Half Sovereigns	5,483,826	476 + 143	17,718	4,036,837	395 + 167	14,366	3,699,685	206 + 89	25,083
Half Crowns	724,344	62 + 30	15,747	499,768	37 + 41	12,814	1,613,363	110 + 94	15,817
Florins	588,978	43 + 34	15,298	796,177	57 + 58	13,846	1,983,511	112 + 101	18,625
Shillings	1,397,542	42 + 37	35,381	3,192,974	81 + 54	47,304	3,797,977	99 + 70	44,946
Sixpences	1,016,957	38 + 20	35,067	4,899,119	177 + 97	35,760	3,362,093	98 + 60	42,558
Threepences	2,027,622	209 + 39	16,352	3,283,457	284 + 94	17,373	4,120,723	297 + 131	19,256
Maundy Fourpences	5,100	7 + 7	729	6,162	6 + 7	948	5,735	3 + 2	2,294
„ Threepences	5,466	4 + 5	1,215	4,568	8 + 9	537	7,700	1 + 1	7,700
„ Twopences	7,371	3 + 1	3,685	7,539	6 + 7	1,160	6,709	10 + 5	895
„ Pence	12,813	8 + 4	2,135	10,501	13 + 11	875	9,908	11 + 8	1,043
Pence	—	—	—	9,802,987	519 + 473	19,764	2,918,417	194 + 122	18,471
Halfpence	—	—	—	5,312,464	172 + 276	23,716	1,425,971	35 + 32	42,566
Farthings	—	—	—	—	—	—	4,041,462	209 + 111	25,259
	16,213,366	1,164 + 670 *1,834	17,681 (Average)	31,852,553	1,755 + 1,294 †3,049	20,894 (Average)	28,511,040	1,455 + 895 ‡2,350	24,265 (Average)

* Including 644 worn dies re-sunk, and again finished for coining.

† Including 344 worn dies re-sunk, and again finished for coining.

‡ Including 372 worn dies re-sunk, and again finished for coining.

No. II.

Memorandum by Mr. Roberts, F.R.S., Chemist of the Mint.

I append a statement of the number of assays made in my Office from the 1st of January to the 31st of December 1878 :—

Gold.		
Assays of bars	3,154	
„ coin	941	
Check assays on fine gold	332	
		4,427
Silver.		
Assays of bars	3,285	
„ coin	942	
Check assays on fine silver	358	
		4,585
Total number of assays made during the year		9,012

The total number of assays made during the preceding year was 6,719.

The duty of assaying a certain number of the gold coins struck at Sydney and Melbourne has, as heretofore, devolved upon my office, and the results prove that the coins issued from these Mints approximate in a remarkable manner to the exact standard of fineness. The average composition of the Pyx coins of the Mints at Calcutta and Bombay, received from the India Office, was also found to be satisfactory. The coins submitted to me from the Imperial Japanese Mint at Osaka well sustain the reputation of the European and native officers who are responsible for their production, and show that the Japanese Government is fully sensible of the importance of coining with accuracy.

Adjustment of Blanks.

Attention has been directed in former Reports* to a process proposed by me in 1870 for adjusting blanks by means of suitable solvents aided by a battery. It was found that the plan could not be adopted with profit in the Mint in this country, as the finished coin alone is weighed. In the Indian Mints and on the Continent it is very generally the practice to weigh the blanks, and it may be interesting therefore to mention that certain experiments on this subject, commenced in 1873 by Mr. S. L. Hynes and continued recently by Mr. F. W. Peterson, both of the Bombay Mint, have been attended with very successful results. The above-named officers have greatly extended the process by transferring metal dissolved from the rouleau of heavy silver blanks to a rouleau of light blanks, the whole being by this means brought to the prescribed weight. Mr. Peterson, who has studied with much care the conditions which affect the uniform solution and deposition of the metal, considers that the battery employed in the earlier experiments may be replaced with advantage by a small magneto-electric machine, and there

* First Annual Report (1870), pp. 42 and 110; and Fifth Annual Report (1874), 37.

is every prospect that the process, which has already been employed on a large scale, will soon take its place in India as an ordinary operation of minting. Should this prove to be possible a considerable saving will of course be effected.

Counterfeit Coining.

The two cases during the past year in which I was called upon to give scientific evidence are of some importance, and present unusual features. In December last a jeweller, named Hedges, was committed for trial at Maidstone, and subsequently convicted, on the charge of uttering counterfeit sovereigns and of having in his possession certain appliances suitable for making the counterfeits, which proved to have been cast in brass and electro-gilt. Such counterfeits are seldom met with, as the high melting point of this alloy renders it difficult, if not impossible, to produce them in the moulds usually employed.

In the second case a foreigner was found guilty at Liverpool of passing sovereigns which had been fraudulently reduced in weight by about five grains. It was evident that the "milling" of the coins in question had been very skilfully tampered with, and the case is important on account of the authoritative decision as to the meaning of the word "counterfeit" to which it has led.

Density of Alloys of Gold and Copper.

The results of experiments made last year on the density of discs of fine and standard gold showed that compression between dies raises their densities by 0·037 and 0·164 respectively. The effect of annealing the compressed discs at a red heat was to lower the density of fine gold by 0·013, and of standard gold by 0·032. The experiments on gold have since been continued by Mr. Rigg with a view to ascertain whether the effect of rolling differs from that of compression between dies, the results hitherto obtained in the case of copper having proved to be somewhat contradictory.*

A fine gold ingot 8 mm. thick was rolled by successive stages to 0·23 mm. The mean of several results showed that the density of the cast metal was 19·294, and that there is a gradual increase to 19·340 at a thickness of 0·74 mm.; when reduced below this point the density appeared to remain unaltered.

The initial density of an ingot containing 92·7 per cent. of gold and 7·3 per cent. of copper was found to be 17·687, and rolling without annealing to half its thickness (from 7·8 to 4·19 mm.) increased the density to 17·704. The metal was now divided into two equal parts, one of which was rolled to a thickness of 1·12 mm., and, as its density was found to be 17·713, it will be evident that the volume of the metal can only be very slightly altered by rolling after it has passed a few times between the rolls. The strip was annealed at a dull red heat, and its density remained unchanged. On annealing the remaining half of the ingot in a similar manner, its density was also found to be invariable, but after prolonged annealing in red-hot charcoal it was much reduced, an effect found to be due to a molecular change in the metal, which rendered it crystalline and brittle.

Notes from Foreign Sources.

Experiments on the Flow of Solids.

The relation which the raised portions of the obverse of a coin should bear to those on the reverse, though of much importance, is often neg-

* Sir W. Thomson, article "Elasticity," Ency. Britt., ninth edition, quoted in Eighth Annual Report (1877), p. 44.

lected by artists, and sometimes by skilful engravers, whose designs on separate dies are, in consequence, imperfectly represented or even distorted when the dies are employed simultaneously to produce impressions on the two sides of a metallic disc. As any theoretical facts which bear directly on this question must be of much practical value in coinage, I may perhaps be permitted to direct attention to some recent experiments by M. Tresca, sous-Directeur du Conservatoire des Arts et Métiers of Paris, on the "flow of solids." He has shown* that, when metals are submitted to compression, they so closely resemble fluids in their behaviour that the shape they will assume can be deduced by calculation. It is even possible to lay down the trajectory of the molecules of the compressed metal, and to establish with certainty the final places they will occupy as compared with their initial positions; it follows, therefore, that the final position of any line or surface may be predicted. In stamping, the pressure is found to be gradually transmitted from one zone or layer of the blank to another, in absolutely the same manner as in the flow of liquids, and with a regularity not less remarkable, although following a much more rapid law of diminution. The engraved work on the die forms in fact a series of channels designed to facilitate the flow of the metal of which the coin or medal consists, and to guide it in the required directions. In the compression of a blank between dies, the portions not to be brought into relief by the action of the press are reduced in thickness for the benefit of the neighbouring raised portions, the metal literally flowing radially from the level parts to the reliefs. This flow is of course gradual, and the presence of scars sometimes seen on medals in high relief may be traced to the junction, during the later strokes of the press, of projections formed in the earlier stages. With such facts in view, M. Tresca has shown that it may sometimes be useful to distribute the flow of the metal by centripetal instead of vertical compression. It is to be hoped that these experiments will be continued, as the results appear to afford a scientific basis for an art which must always depend greatly on technical skill and individual experience.

Paris Exhibition.

As regards design applied to coinage, the Exhibition, more especially the French section, was both instructive and interesting. The remarkable portrait medals by Patscarme, the clever treatment of modern portraits and subjects, in imitation of Greek coins, by Zwillau, and the admirable works by Dupuis, which resemble early Italian cast medals, deserve the highest praise, and the collection as a whole proves the existence in France of a vigorous school of medallic art.

The influence of the chemical composition of steel on its resistance is a question of so much importance in relation to the preparation of dies, that such records of experiments as the Exhibition contained were of special interest.

The iron-works of Reschitza in Hungary exhibited curves and photographs recording the results of trials conducted by Prof. Bauschinger as to the compression, traction, flexure, shearing, and torsion of different varieties of steel. Similar results were published by the Swedish Comptoir des Forges, and by the Terre-Noire Company. The results of these trials have since been discussed in a very valuable and elaborate paper by

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* Paper read before the Society of Mechanical Engineers, Paris. Translated in the Journal of the Franklin Institute, Philadelphia, 1878, vol. lxxvi., pp. 263, 326, and 396.

M. V. Deshayes,* engineer of the latter company, who shows, from the experiments on impact and traction, that steels which oppose a comparatively high resistance when submitted to traction and contain from 0·6 to 0·7 per cent. of carbon, also resist impact very perfectly, and the same may be said as regards steels containing 0·8 to 1·0 per cent. of manganese and only traces of carbon. He further considers at great length the effects of various impurities on the several physical properties of steel.

Mechanical operations are not directly connected with my Department, but I may state, as the result of a careful examination of the various classes in the Paris Exhibition, that, although the improvement in design of machinery generally in recent years is very marked, there is but little evidence of advance in the appliances used for coinage. The well-known applications of friction gearing for transmitting motion to medal presses, shown by M. A. Bidault, and the movable furnaces exhibited by M A. Piat deserve, however, to be specially mentioned. In these furnaces the portion which contains the crucible may be detached from the flue so as to admit of the molten metal being poured into moulds without the removal of the crucible from the incandescent fuel. The various fittings are very ingenious, and the method well deserves trial in Mints; its use is stated to effect considerable economy in labour, fuel, and crucibles, and to possess many incidental advantages.

Research in Progress.

Considerable progress has been made in the investigation, commenced last year, with the view to extend the researches of the late Mr. Graham on the transpiration of liquids to the passage of molten metals and alloys through capillary tubes, and a preliminary report on the subject has already been submitted to the Royal Society. It was found that, when tubes with the finest bores that could be produced by a skilful tobacco-pipe maker are employed, the flow of mercury takes place in accordance with Torricelli's well-known law, so that it was open to question whether the numerous results obtained on molten alloys of lead and tin could be considered to be of the nature of true transpiration. Subsequent experiments showed that a tube 600 mm. long, with a bore 0·4 mm. in diameter, causes mercury to obey the transpiration law of Poiseuille. It thus became necessary to devise a means of producing clay tubes of less than half the diameter of the finest that can be formed by ordinary means. Since the close of the year the difficulty of manipulation has, it is hoped, been overcome, and, as tubes of almost any degree of fineness can now be made, the experiments will at once be resumed.

W. Chandler Roberts,
3rd March 1879. Chemist of the Mint.

* Bull. Chim. Soc. Paris, 1879, t. xxxi. pp. 166–186 and 205–227.

No. III.

General Account of Expenses and Receipts.

Abstract Statement, showing the payments in the Year ended 31st December 1878, for the Salaries and Expenses of the Royal Mint; the amounts of Profit or Loss resulting in the Year on account of the Silver and Bronze Coinage (as per Accounts appended); and the amount realised by the sale of Sweepings from the Gold Coinage, and other miscellaneous receipts of the Mint payable to the Exchequer.

	£	s.	d.	£	s.	d.
Payments in the year for salaries and expenses, viz.:						
Salaries, allowances, and wages	16,316	16	9			
Police	732	13	1			
Incidental office expenses	138	15	2			
Machinery and repairs	2,658	8	10			
Incidental coinage expenses	3,235	17	0			
Brokerage	125	2	1			
				23,207	12	11
Superannuation and compensation allowances				4,616	7	3
Amount of expenditure incurred in the year by other Departments on account of the Mint, viz.:						
By the Office of Works, for repair of buildings, parochial rates, fuel, gas, &c.	5,196	6	4			
By the Stationery Office for stationery, &c.	132	0	0			
				5,328	6	4
				33,152	6	6
Cost of alloy metal for gold coinage				Nil.		
Loss on gold coinage (waste, partially recoverable in the sweepings)				5,677	15	6
Loss on worn silver coin exchanged (as per Account, page 42)				47,108	0	6
Do. exchanged at the Sydney Mint				1,851	7	1
				87,789	9	7

	£	s.	d.	£	s.	d.
Profit on silver bullion purchased in the year for coinage (as per Account, page 42)				31,993	8	8
Profit on bronze coinage (as per Account, page 43)				1,751	15	4
Amount received for Sweepings from the Gold Coinage				858	16	5
Miscellaneous receipts, viz.:						
For dies supplied for the Sydney and Melbourne Mints	171	12	6			
For striking medals, making assays, and other Mint charges on account of the Indian and Colonial Governments	784	19	10			
For rent of Refinery, and other miscellaneous receipts	684	19	5			
				1,641	11	9
Excess of expenses over receipts in the year ended 31st December 1878				51,543	17	5
				87,789	9	7

Royal Mint,
20th March 1879.

C. W. Fremantle,
Deputy Master of the Mint.

No. IV.

SILVER COINAGE ACCOUNT.

ACCOUNT of the payments made in the Year ended 31st December 1878, for the purchase of Silver Bullion and for worn Silver Coin; the amount received for Silver Coin sold; and the value of Silver Coin and Bullion in store at the commencement and close of the Year; showing the amount of Profit realised on the Silver Bullion purchased for Coinage, and the Loss resulting from the exchange of worn Silver Coin, in the Year.

	Silver Bullion.	Worn Silver Coin.		Silver Bullion.	Worn Silver Coin.
	£ s. d.	£ s. d.		£ s. d.	£ s. d.
Mint value of silver coin and bullion in store at the commencement of the year:			Amount received in the year for silver coin sold at its nominal value	567,328 4 3	
£ s. d.			Amount received for sweepings	88 2 1	
Coin 84,809 7 6			Mint value of silver coin melted into bullion (1,289,189·010 oz. at 5s.6d. per oz.) transferred to silver bullion account as per contra		354,526 19 6
Bullion 276,677 4 2			Mint value of silver coin and bullion in store at the end of the year:—		
	361,486 11 8		£ s. d.		
Amount paid in the year for silver bullion purchased	100,132 2 8		New coin at its nominal value 131,711 5 9		
Mint value of worn silver coin melted into bullion (transferred as per contra)	354,526 19 6		Bullion at the Mint value of 5s. 6d. per ounce 149,076 10 5		
Amount paid for metal (for alloy)	Nil.			280,787 16 2	
Value of copper (for alloy) transferred from Copper Coinage Account	65 0 0				
Amount paid in exchange for worn silver coin at the nominal value (1,289,189·010 oz.)		401,635 0 0	Loss on worn silver coin exchanged		47,108 0 6
Profit on silver bullion purchased for coinage	31,993 8 8				
	848,204 2 6	401,635 0 0	£	848,204 2 6	401,635 0 0

	£ s. d.	£ s. d.
Seignorage on bullion purchased	32,052 0 6	
Amount received for sweepings	88 2 1	
		32,140 2 7
Deduct:		
Waste (partially recoverable in sweepings)	81 13 11	
Amount paid for alloy metal	65 0 0	
		146 13 11
Profit, as above, on silver bullion purchased		31,993 8 8

Royal Mint,
20th March 1879.

C. W. FREMANTLE,
Deputy Master of the Mint.

No. V.

COPPER (BRONZE) COINAGE ACCOUNT.

ACCOUNT of the payments made in the Year ended 31st December 1878, for the purchase of Copper and other Metal for Bronze Coinage, including old Copper Coin; the amount received for Bronze Coin and old Copper sold; and the value of Bronze Coin and Metal in store at the commencement and close of the Year; showing the amount of Profit or Loss which has resulted in the Year.

	£	s.	d.	£	s.	d.
Value of bronze coin and metal in store at the commencement of the year :—						
Bronze coin (at its nominal value)	26,843	19	11			
*Bronze bars (at the Mint value)	38,577	1	5			
Old copper coin (at the market value of the metal)	927	10	9			
Tin (do.)	52	0	6			
Zinc (do.)	14	13	9			
				66,415	6	4
Amount paid in the year for bronze metal	Nil					
For copper						
For tin	Nil					
For zinc						
Amount paid for old copper coin (at its nominal value)	979	3	1			
Do. do as metal	183	0	6			
				1,162	3	7
Balance, viz.:						
Profit on bronze coinage	1,751	15	4			
Amount realised by the sale, &c., of surplus metal (old copper coin)	65	0	0			
				1,816	15	4
				£69,394	5	3

	£	s.	d.	£	s.	d.
Amount received in the year for bronze coin sold at its nominal value				39,245	0	0
Amount received for sweepings				Nil		
Value of old copper coin transferred to Silver Coinage Account (for alloy)				65	0	0
Value of bronze coin and metal in store at the end of the year :—						
Bronze coin (at its nominal value)	4,671	10	6			
*Bronze bars (at the Mint value)	24,153	7	0			
Old copper coin (at the market value of the metal)	1,211	18	3			
Tin (do.)	36	0	5			
Zinc (do.)	11	9	1			
				30,084	5	3
				£ 69,394	5	3

* The value of bronze bars is calculated on the assumption that a proportion will be coined into pence and the remainder into halfpence and farthings.

Royal Mint,
20th March 1879.

C. W. FREMANTLE,
Deputy Master of the Mint.

No. VI.

Consolidated Fund Advances and Repayments.

An Account of the sums advanced in each Year from the Consolidated Fund for the purchase of Bullion for Coinage; and of the sums paid in each Year to the account of Her Majesty's Exchequer at the Bank of England in repayment thereof.

Date.	Amounts Advanced from the Consolidated Fund.		Amounts paid into the Exchequer in Repayment of Advances.		Remarks.
	£ s. d.	£ s. d.		£ s. d.	
1837	- - -	22,000 0 0	- - -	- - -	As given in detail in previous Returns.
1838	- - -	196,029 19 4	- - -	168,029 19 4	
1839	- - -	400,000 0 0	- - -	350,000 0 0	
1840	- - -	170,000 0 0	- - -	175,000 0 0	
1841	- - -	100,000 0 0	- - -	135,000 0 0	
1842	- - -	180,000 0 0	- - -	162,120 4 0	
1843	- - -	350,000 0 0	- - -	265,000 0 0	
1844	- - -	550,000 0 0	- - -	501,389 17 0	
1845	- - -	850,000 0 0	- - -	678,772 2 9	
1846	- - -	300,000 0 0	- - -	429,937 1 11	
1847	- - -	100,000 0 0	- - -	217,933 10 2	
1848	- - -	- - -	- - -	18,534 3 1	
1849	- - -	150,000 0 0	- - -	120,000 0 0	
1850	- - -	150,000 0 0	- - -	120,000 0 0	
1851	- - -	100,000 0 0	- - -	187,213 1 1	
1852	- - -	391,970 0 8	- - -	191,970 0 8	
1853	- - -	508,029 19 4	- - -	550,000 0 0	
1854	- - -	100,000 0 0	- - -	200,000 0 0	
1855	- - -	250,000 0 0	- - -	300,000 0 0	
1856	- - -	450,000 0 0	- - -	450,000 0 0	
1857	- - -	420,000 0 0	- - -	350,000 0 0	
1858	- - -	400,000 0 0	- - -	400,000 0 0	
1859	- - -	550,000 0 0	- - -	650,000 0 0	
1860	- - -	270,000 0 0	- - -	150,000 0 0	
1861	- - -	400,000 0 0	- - -	550,000 0 0	
1862	- - -	400,000 0 0	- - -	350,000 0 0	
1863	- - -	250,000 0 0	- - -	250,000 0 0	
1864	- - -	600,000 0 0	- - -	630,000 0 0	
1865	- - -	520,000 0 0	- - -	460,000 0 0	
1866	- - -	410,000 0 0	- - -	510,000 0 0	
1867	- - -	300,000 0 0	- - -	250,000 0 0	
1868	- - -	220,000 0 0	- - -	200,000 0 0	
1869	- - -	250,000 0 0	- - -	130,000 0 0	
1870	- - -	235,000 0 0	- - -	350,000 0 0	
1871	- - -	820,000 0 0	- - -	600,000 0 0	
1872	- - -	1,750,000 0 0	- - -	1,250,000 0 0	
1873	- - -	650,000 0 0	- - -	950,000 0 0	
1874	- - -	650,000 0 0	- - -	763,029 19 4	
1875	- - -	500,000 0 0	- - -	650,000 0 0	
1876	- - -	325,000 0 0	- - -	250,000 0 0	
1877	- - -	500,000 0 0	- - -	440,000 0 0	
1878 Feb. 7	40,000 0 0		Mar. 1	120,000	
Apr. 18	40,000 0 0		,, 22	25,000	
May 10	50,000 0 0		May 30	50,000	
June 26	75,000 0 0		July 9	75,000	
Aug. 7	50,000 0 0		Aug. 7	50,000	
,, 31	50,000 0 0		,, 31	60,000	
Sep. 26	50,000 0 0		Sep. 27	50,000	
Oct. 19	75,000 0 0		Oct. 16	50,000	
Nov. 5	50,000 0 0		Nov. 5	50,000	
,, 19	25,000 0 0		,, 19	25,000	
		505,000 0 0	Dec. 20	50,000	605,000 0 0
			Balance due to the Exchequer on 31 Dec. 1878		285,000 0 0
	£	16,243,029 19 4		£	16,243,029 19 4

Royal Mint,
20th March 1879.

C. W. Fremantle,
Deputy Master of the Mint.

No. VII.

MONEYS COINED, &c. IN THE LAST TEN YEARS.

STATEMENT of all Gold, Silver, and Copper (Bronze) Moneys of the Realm, coined, and of worn Silver Coin exchanged, &c., from the 1st day of January 1869 to the 31st day of December 1878.

GOLD COINAGE.

Date.	Sovereigns.			Half Sovereigns.			Total Value.
	Weight.	Number of Pieces.	Value.	Weight.	Number of Pieces.	Value.	
	oz.		£ s. d.	oz.		£ s. d.	£ s. d.
1869	1,654,272·155	6,441,322	6,441,322 4 0	239,070·996	1,861,764	930,882 13 9	7,372,204 17 9
1870	468,104·162	1,822,680	1,822,680 11 7	126,021·298	981,408	490,695 8 7	2,313,376 0 2
1871	2,262,799·401	8,810,775	8,810,775 3 4	284,784·820	2,217,760	1,108,880 17 10	9,919,656 1 2
1872	3,504,047·648	13,643,880	13,643,885 10 7	415,423·760	3,235,112	1,617,556 5 3	15,261,441 15 10
1873	611,964·096	2,382,832	2,382,835 4 0	257,267·094	2,003,464	1,001,733 14 11	3,384,568 18 11
1874	133,452·050	519,628	519,628 18 4	241,909·844	1,883,872	941,936 9 1	1,461,565 7 5
1875	—	—	—	62,475·514	486,494	243,264 0 8	243,264 0 8
1876	846,152·264	3,294,700	3,294,705 7 6	360,049·696	2,804,000	1,401,943 10 1	4,696,648 17 7
1877	—	—	—	252,062·638	1,962,800	981,468 17 11	981,468 17 11
1878	284,119·162	1,106,361	1,106,288 19 9	297,600·028	2,317,506	1,158,780 2 2	2,265,069 1 11
	9,764,910·938	38,022,178	38,022,121 19 1	2,536,665·688	19,754,180	9,877,142 0 3	47,899,263 19 4

SILVER COINAGE.

Date.	Half Crowns.			Florins.			Shillings.		
	Weight.	Number of Pieces.	Value.	Weight.	Number of Pieces.	Value.	Weight.	Number of Pieces.	Value.
	oz.		£	oz.		£	oz.		£
1869	—	—	—	108,000·000	297,000	29,700	133,920·000	736,560	36,828
1870	—	—	—	718,560·000	1,976,040	197,604	347,640·000	1,908,720	95,436
1871	—	—	—	1,293,840·000	3,558,060	355,806	876,240·000	4,819,320	240,966
1872	—	—	—	2,516,400·000	6,920,100	692,010	1,612,080·000	8,866,440	443,322
1873	—	—	—	2,169,360·000	5,965,740	596,574	1,179,360·000	6,486,480	324,324
1874	993,600·000	2,185,920	278,240	657,360·000	1,807,740	180,774	1,000,080·000	5,500,440	275,022
1875	505,440·000	1,111,968	138,996	415,440·000	1,142,460	114,246	792,000·000	4,356,000	217,800
1876	288,000·000	633,600	79,200	221,040·000	607,860	60,786	139,680·000	768,240	38,412
1877	203,040·000	446,688	55,836	249,840·000	687,060	68,706	594,000·000	3,267,000	163,350
1878	666,000·000	1,465,200	183,150	649,440·000	1,785,960	178,596	568,080·000	3,124,440	156,222
	2,656,080·000	5,843,376	730,422	8,999,280·000	24,748,020	2,474,802	7,242,480·000	39,833,640	1,991,832

* The amounts for 1878 shown in this Return differ from those given on page 4, as the latter give the number of good pieces actually coined, while the former show the amount of coin delivered to the public, or into store at the Mint Office, during the year.

SILVER COINAGE—*cont.*

Date.	Sixpences.			Fourpences.			Threepences.		
	Weight.	Number of Pieces.	Value.	Weight.	Number of Pieces.	Value.	Weight.	Number of Pieces.	Value.
	oz.		£	oz.		£ s. d.	oz.		£ s. d.
1869	35,280·000	388,080	9,702	252·000	4,158	69 6 0	204·000	4,488	56 2 0
1870	95,040·000	1,045,440	26,136	252·000	4,158	69 6 0	63,564·000	1,398,408	17,480 2 0
1871	333,360·000	3,666,960	91,674	252·000	4,158	69 6 0	47,004·000	1,034,088	12,926 2 0
1872	343,440·000	3,777,840	94,446	252·000	4,158	69 6 0	50,604·000	1,113,288	13,916 2 0
1873	399,600·000	4,395,600	109,890	252·000	4,158	69 6 0	184,524·000	4,059,528	50,744 2 0
1874	384,480·000	4,229,280	105,732	252·000	4,158	69 6 0	202,524·000	4,455,528	55,694 2 0
1875	295,920·000	3,255,120	81,378	252·000	4,158	69 6 0	150,684·000	3,315,048	41,438 2 0
1876	76,320·000	839,520	20,988	252·000	4,158	69 6 0	83,004·000	1,826,088	22,826 2 0
1877	370,080·000	4,070,880	101,772	252·000	4,158	69 6 0	113,244·000	2,491,368	31,142 2 0
1878	238,320·000	2,621,520	65,538	252·000	4,158	69 6 0	110,364·000	2,428,008	30,350 2 0
	2,571,840·000	28,290,240	707,256	2,520·000	41,580	693 0 0	1,005,720·000	22,125,840	276,573 0 0

SILVER COINAGE—*cont.*

Date.	Twopences.			Pence.			Total Value of Silver Coined.	Total Amount Paid for Silver Bullion.
	Weight.	Number of Pieces.	Value.	Weight.	Number of Pieces.	Value.		
	oz.		£ s. d.	oz.		£ s. d.	£ s. d.	£ s. d.
1869	144·000	4,752	39 12 0	120·000	7,920	33 0 0	76,428 0 0	135,083 0 11
1870	144·000	4,752	39 12 0	120·000	7,920	33 0 0	336,798 0 0	100,483 5 3
1871	144·000	4,752	39 12 0	120·000	7,920	33 0 0	701,514 0 0	720,821 5 9
1872	144·000	4,752	39 12 0	120·000	7,920	33 0 0	1,243,836 0 0	1,544,848 14 8
1873	144·000	4,752	39 12 0	120·000	7,920	33 0 0	1,081,674 0 0	522,957 0 2
1874	144·000	4,752	39 12 0	120·000	7,920	33 0 0	890,604 0 0	421,928 7 9
1875	144·000	4,752	39 12 0	120·000	7,920	33 0 0	594,000 0 0	388,744 17 3
1876	144·000	4,752	39 12 0	120·000	7,920	33 0 0	222,354 0 0	—
1877	144·000	4,752	39 12 0	120·000	7,920	33 0 0	420,948 0 0	310,290 8 9
1878	144·000	4,752	39 12 0	120·000	7,920	33 0 0	613,998 0 0	100,132 2 8
	1,440·000	47,520	396 0 0	1,200·000	79,200	330 0 0	6,182,154 0 0	4,245,289 3 2

BRONZE COINAGE.

Date.	Pence.			Halfpence.			Farthings.			Total Value of Bronze Coined.	Total Amount Paid for Bronze Bullion and Old Copper Coin.
	Weight.	Number of Pieces.	Value.	Weight.	Number of Pieces.	Value.	Weight.	Number of Pieces.	Value.		
	Tons.		£	Tons.		£ s. d.	Tns. cwt. qr. lbs.		£ s. d.	£ s. d.	£ s. d.
1869	24	2,580,480	10,752	18	3,225,600	6,720 0 0	9 0 0 0	3,225,600	3,360 0 0	20,832 0 0	8,355 15
1870	53	5,698,560	23,744	24	4,300,800	8,960 0 0	- - -	- - -	- - -	32,704 0 0	6,726 11
1871	12	1,290,240	5,376	6	1,075,200	2,240 0 0	- - -	- - -	- - -	7,616 0 0	1,196 15
1872	80	8,601,600	35,840	25	4,480,000	9,333 6 8	6 0 0 0	2,150,400	2,240 0 0	47,413 6 8	898 17
1873	79	8,494,080	35,392	20	3,584,000	7,466 13 4	9 0 0 0	3,225,600	3,360 0 0	46,218 13 4	13,618 9
1874	109	11,719,680	48,832	35	6,272,000	13,066 13 4	10 0 0 0	3,584,000	3,733 6 8	65,632 0 0	30,997 8
1875	110	11,827,200	49,280	36	6,451,200	13,440 0 0	19 0 0 0	6,809,600	7,093 6 8	69,813 6 8	24,000 2
1876	103	11,074,560	46,144	38	6,809,600	14,186 13 4	3 0 0 0	1,075,200	1,120 0 0	61,450 13 4	14,663 14
1877	90	9,676,800	40,320	29	5,196,800	10,826 13 4	- - -	- - -	- - -	51,146 13 4	9,392 7
1878	23	2,472,960	10,304	8	1,433,600	2,986 13 4	10 0 0 0	3,584,000	3,733 6 8	17,024 0 0	1,162 3 7
	683	73,436,160	305,984	239	42,828,800	89,226 13 4	66 0 0 0	23,654,400	24,640 0 0	419,850 13 4	111,012 6 4

Worn Silver Coin purchased for Exchange.

Date.	Weight.	Nominal Value	Mint Value at 5s. 6d. per oz.	Loss by Exchange.
	oz.	£	£ s. d.	£ s. d.
1869 - -	325,976·928	105,000	89,643 13 0	15,356 7 0
1870 - -	356,023·295	115,000	97,906 8 0	17,093 12 0
1871 - -	326,107·111	105,000	89,679 9 1	15,320 10 11
1872 - -	347,584·522	110,686 14	95,585 14 11	15,100 19 1
1873 - -	594,222·521	188,263 6	163,411 3 11	24,852 2 1
1874 - -	496,416·900	156,355	136,514 8 0	19,840 12 0
1875 - -	488,252·973	154,000	134,269 11 3	19,730 8 9
1876 - -	883,640·410	276,000	243,001 2 3	32,998 17 9
1877 - -	660,016·212	207,280	181,504 9 0	25,775 11 0
1878 - -	1,289,189·010	401,635	354,526 19 6	47,108 0 6
	5,767,428·982	1,819,220	1,586,042 18 11	233,177 1 1

The yearly Average Price paid per ounce for Silver Bullion purchased in the market for coinage in the Years 1869 to 1878, both inclusive, was as follows:—

1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.
d. $60\frac{4}{16}$	d. $60\frac{1}{2}$	d. $60\frac{7}{16}$	d. $60\frac{8}{16}$	d. $58\frac{13}{16}$	d. $58\frac{1}{4}$	d. $56\frac{7}{16}$	d. Nil	d. $56\frac{3}{16}$	d. $50\frac{3}{16}$

The Amount of Seignorage on the Silver Coinage paid into the Exchequer in the Years 1869 to 1878 has been—

1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
12,345 4 10	9,027 17 9	55,067 19 4	77,391 12 10	85,680 10 2	101,120 0 0	20,306 10 4	52,286 2 0	31,439 2 11	*22,268 15 6

* This sum represents the amount of Seignorage on the Silver Coinage actually paid into the Exchequer during the year 1878, whereas the figures given at page 42 represent the amount which accrued during the year on the purchase of bullion.

Royal Mint,
20th March 1879.

C. W. Fremantle,
Deputy Master of the Mint.

No. VIII.

Issue of Bronze Coin, &c., to 31st December 1878.

New Bronze Coin issued during the Year 1878. (Nominal Value.)				Old Copper Coin withdrawn from Circulation during the Year 1878.* (Nominal Value.)	Total Issue of Bronze Coin from 17 December 1860 to 31 December 1878. (Nominal Value.)				Total Amount of Old Copper Coin purchased from the Public and withdrawn from Circulation from 17 Dec. 1860 to 31 Dec. 1878. (Nominal Value.)	Amount of New Bronze Coin in Store at the Mint, prepared for issue, on 31 December 1878. (Nominal Value.)			
Pence.	Half-pence.	Far-things.	Total.		Pence.	Half-pence.	Far-things.	Total.		Pence.	Half-pence.	Far-things.	Total.
£ 26,530	£ 8,620	£ 4,055	£ 39,205	£ s. d. 979 3 1	£ 923,865	£ 409,047	£ 74,256	£ 1,407,168	£ s. d. 581,340 0 11	£ s. d. 2,384 16 11	£ s. d. 1,766 12 9	£ s. d. 70 0 10	£ s. d. 4,671 10 6

Royal Mint,
20th March 1879.

C. W. Fremantle,
Deputy Master of the Mint.

No. IX.

Correspondence respecting the Supply of Silver and Bronze Coinage to the Colonies.

Sir, Treasury Chambers, 12th February 1879.

I am commanded by the Lords Commissioners of Her Majesty's Treasury to request you to call the attention of the Secretary of State to the correspondence which passed between the Treasury and the Colonial Office in 1873, on a Memorial from the banks of Melbourne, praying that token silver coins might be struck at the Melbourne branch of the Royal Mint.

2. It will be in your recollection that my Lords at that time declared their readiness to entertain favourably suggestions for maintaining the silver coinage of the Colony in good condition, adding that, while they considered it necessary in the interest of all concerned that tokens should be issued by the Imperial Government alone, they attached no value to the small amount of profit which the reservation of the right entailed.

3. My Lords have now received from the Master of the Mint a copy of a further Memorial from the Associated Banks of Melbourne, complaining that the token silver circulating in that Colony is deficient in quality and quantity, and representing that the cost of obtaining fresh supplies must prevent the banks from undertaking that duty.

4. Under the Regulations communicated to the Colonial Office on the 14th June 1871, token coins are supplied to Colonial Governments on payment of the full nominal value, and of all expenses connected with their shipment to the Colony concerned. Up to the present time, the Colonial Governments generally have accepted the conditions thus laid down; and there can be no doubt that the state of the coinage in the Colonies has materially improved.

5. But, on full consideration, my Lords have come to the conclusion that the application of the banks at Melbourne is in itself reasonable, and in accordance, therefore, with the policy announced in their letter of 8th December 1873 above mentioned, they have revised the Regulations of the 14th June 1871.

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* The 31st of December 1877 was fixed as the limit of time for the reception by the Mint of old copper coin withdrawn from circulation in Colonies, but two consignments were received, by special Treasury authority, after the close of the year.

6. I am to forward you a copy of them as revised, and I am to ask that you will lay them before the Secretary of State. *[Sir Michael Hicks Beach will perceive that the Mint will from henceforth defray all expenses connected with the shipment of silver and bronze coin to the port in the Colony agreed on between the Master of the Mint and the Agent of the Colony in London, including packing, freight, insurance, and shipping charges.

7. Thus bronze coin is now for the first time included in the Regulations, and the Colonies using Imperial token coin will, in all cases, be supplied with such amounts as they require on the mere payment of its nominal value.

8. I am to request that the Secretary of State, if he approves of the proposed arrangement, will cause copies of the amended Regulations to be sent to the Governors of all Colonies using the Imperial system of coinage, and to the Agents of those Governments in London.

9. It will be observed that it is not necessary to require that application for supplies of coin should any longer be made to the Mint through the Colonial Office and the Treasury.]

10. The petitioning banks request that the Branch Mint at Melbourne may be entrusted with a supply of silver coin for issue to the public. This is already the rule with respect to bronze coin, and my Lords have much pleasure in extending it to silver.

11. It will be desirable, therefore, that separate communications should be addressed to the Governors of New South Wales and Victoria, stating that, as there are branches of the Royal Mint at Sydney and Melbourne, the Deputy Masters at those places have been authorised to apply for consignments of new silver coin to be held by them for issue to applicants, and have been instructed to give public notice, with the Governor's approval, of the conditions under which the coin will be issued. The Deputy Masters will be instructed to comply with all demands for the coin in question, unless there should be any special reason for refusal, in which event they will take the pleasure of the Governors.

*[12. My Lords trust that the Secretary of State will point out to the Governors of the Colonies affected by the Regulations that, as the conditions of supply have now been made so favourable, it is incumbent on them to secure that the silver coinage is kept in proper condition, by the systematic withdrawal of worn coin.]

I am, &c.
WILLIAM LAW.

The Assistant Under Secretary of State
for the Colonies.

(Enclosure.)

REGULATIONS for the SUPPLY of BRITISH SILVER and BRONZE COINAGE to the COLONIES.

New silver and bronze coin (half-crowns, florins, shillings, sixpences, and threepences, and pence, halfpence, and farthings) can be supplied to Colonial Governments from the Royal Mint on the following conditions:—

1. On receiving an application from the agent of the Colonial Government in London, the Master of the Mint will cause to be packed, and held to his order, such an amount of silver or bronze coin as may be required on behalf of the Colony.

2. The Master of the Mint will undertake the payment of all expenses, including packing, freight, insurance, and shipping charges, connected with the shipment of silver and bronze coin to the port in the Colony agreed upon by the Master of the Mint and the agent of the Colony in London.

3. The agent of the Colonial Government will be required to pay to the account of the Master of the Mint at the Bank of England, on or before the delivery of the coin, the sum representing the nominal value of the new silver or bronze coin ordered.

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* The Extracts marked [ ] sent with Colonial Office Circular Despatch No. 1.

4. The Colonial Government will be required to make such arrangements as may be deemed necessary for the withdrawal of worn silver coin from circulation, and to cause the coin so withdrawn to be forwarded to the Mint or one of its branches (at Sydney or Melbourne), for recoinage. The Master of the Mint will defray all expenses, including freight, insurance, and shipping charges, incurred in the transmission of worn coin to London, Sydney, or Melbourne, from a port of shipment to be agreed upon by the Master of the Mint, or the Deputy Master at Sydney or Melbourne, and the agent of the Colony.

5. The Imperial Government will pay to the Colonial Government, or its agent, the nominal value of the worn coin so withdrawn from circulation, as soon as it is received at the Royal Mint or one of its branches.

Treasury Chambers,
12th February 1879.

SIR, Downing Street, 27th February 1879.

I AM directed by the Secretary of State for the Colonies to acknowledge the receipt of your letter of the 12th instant, enclosing revised regulations for the supply of new silver and bronze coin.

2. I enclose for the information of the Lords Commissioners of the Treasury copies of circular Despatches which Sir Michael Hicks Beach has addressed to the Governors of the Colonies using the Imperial system of coinage, and to the Governors of other Colonies for information, enclosing copies of the new regulations, which he has no doubt will be received in those Colonies with great satisfaction.

3. Copies of the revised regulations have also been sent to the Crown Agents for the Colonies and to the Agents-General in London for the Australasian Colonies.

I am, &c.

The Secretary to the Treasury. ROBERT G. W. HERBERT.

(Enclosure.)

Circular No. 2.

SIR, Downing Street, 27th February 1879.

WITH reference to the Earl of Kimberley's circular Despatch of the 27th of June 1871, enclosing regulations respecting the supply of British silver coins to Colonial Governments, I have the honour to enclose, for communication to your Legislature and for publication in the Colony under your Government, a copy of [(in Circular No. 1) extracts of] a letter from the Treasury, enclosing revised regulations for the supply of new silver and bronze coin.

2. I entirely concur in the opinion expressed by the Lords Commissioners of the Treasury, that as the conditions of supply of new coin have now been made so favourable, it is incumbent on the Governors of Her Majesty's Colonies to secure that the silver coinage is kept in proper condition by the systematic withdrawal of worn coin, and I trust that they will specially charge themselves with that duty.

3. Copies of this Despatch and of its enclosures have been sent to the Agent-General in London for your Government [(in Circular No. 1) to the Crown Agents for the Colonies, and to the Agents-General in London for the Australasian Colonies].

I have, &c.

The Officer Administering the Government of M. E. HICKS BEACH.

No. X.

VERDICT of the JURY of the Goldsmiths' Company at the Trial of the Pyx held on the 10th of July 1878.

WE, whose names are hereunder written, having been sworn this 10th day of July 1878, before the Queen's Remembrancer, at Goldsmiths' Hall, in the City of London, have made the assays and trials of Her Majesty's gold and silver coins in the Pyx of the Mint, and which, according to accounts produced by the Officers of the Mint, were coined in the said Mint from the 1st day of July 1877 to the 30th day of June 1878, both days inclusive. We ascertained that the number of coins, both of gold and silver, in each packet produced to us, corresponded with the number which the Officers of the Mint represented it to contain, and we took a coin or coins from each of such packets of gold coins, making altogether 26 sovereigns or 20-shilling pieces, and 56 half-sovereigns or 10-shilling pieces, and we weighed each of the said coins separately, so as to ascertain whether they were within the remedy prescribed in the First Schedule of the Coinage Act, 1870. We found that the amount of variation from the standard of weight specified in the said First Schedule of the said Act was minus five thousandths of an ounce (or ·005) on the whole of such coins, and that, therefore, they were within the prescribed remedy as to weight. We then melted the said gold coins, so taken out and weighed, into an ingot, and assayed such ingot, comparing it with the standard gold trial-plate produced by the Board of Trade, so as to ascertain whether the metal was within the remedy as to fineness prescribed in the said First Schedule to the said Act, and we found that there was no variation thereof from the standard of fineness specified in the said First Schedule to the said Act. We weighed the residue of the said gold coins in bulk, and we ascertained that they were within the remedy as to weight. We then took from such residue five sovereigns and four half-sovereigns and weighed and assayed them separately, and we found that such sovereigns weighed respectively,—the first 123·279 grains, the second 123·272 grains, the third 123·281 grains, the fourth 123·304 grains, and the fifth 123·174 grains, and that such half-sovereigns weighed respectively,—the first 61·587 grains, the second 61·617 grains, the third 61·637 grains, and the fourth 61·567 grains. We then assayed the said five sovereigns and four half-sovereigns separately, and we found the millesimal fineness of such sovereigns to be 916·8, 916·8, 916·8, 916·8, and 916·8 respectively, and the millesimal fineness of such half-sovereigns to be 916·5, 916·7, 916·8, and 916·6 respectively. We also took a coin from each of such packets of silver coins, making altogether 10 half-crowns, 9 florins, 6 shillings, 8 sixpences, and 9 threepences, and weighed each of the said silver coins separately, so as to ascertain whether they were within the remedy of the said First Schedule of the said Coinage Act, 1870. We found that the amount of variation from the standard of weight specified in the said First Schedule of the said Act was minus seven thousandths of an ounce (or ·007) on the whole of such coins, and that, therefore, they were within the prescribed remedy as to weight. We then melted the said silver coins, so taken out and weighed, into an ingot, and assayed such ingot, comparing it with the standard silver trial-plate produced by the Board of Trade, so as to ascertain whether the metal was within the remedy as to fineness prescribed in the said First Schedule to the said Act, and we found that the amount of variation from the standard of fineness specified in the said First Schedule to the said Act was minus fifteen ten-thousandths (or ·0015), and, therefore, that the said metal was within the prescribed remedy as to fineness. We weighed the residue of the said silver coins in bulk, and we ascertained that they were within the remedy as to weight. We then took from such residue one half-crown, one florin, one shilling, and one sixpence, and weighed and assayed them separately, and we found that such half-crown weighed 218·381 grains, that such florin weighed 174·745 grains, that such shilling weighed 87·572 grains, and that such sixpence weighed 43·656 grains. We then assayed the said half-crown, the said florin, the said shilling, and the said sixpence separately, and we found the millesimal fine-

ness of such half-crown to be 924·8, of such florin to be 923·8, of such shilling to be 924·2, and of such sixpence to be 924·9.

(Signed) G. SMITH HAYTER, Foreman. STEPHEN SMITH,
JOHN GRAY. GEORGE LAMBERT.
H. S. THORNTON. HENRY JOHN LIAS.
G. MATTHEY. WM. ROBINSON.
FRANCIS B. THOMAS. HY. PIZEY.

W. F. POLLOCK,
Queen's Remembrancer.

No. XI.

REPORT of the Deputy Master of the Sydney Branch of the Royal Mint for the year 1878.

SIR, Royal Mint, Sydney, 21st January 1879.

I HAVE the honour to submit, for the consideration of the Master of the Mint, my Report on the Sydney Branch for 1878.

The production of gold in New South Wales and the imports from Queensland having considerably decreased during the past year, the receipts of gold for coinage have reached only 365,174 ounces, of the value of 1,308,898*l.*, of which 107,348 ounces, of the value of 382,741*l.*, were raised in this Colony.

The issues have been 1,322,000*l.* in coin, and 6,276*l.* in bullion, making a total of 1,328,276*l.*, against 1,596,657*l.* issued in 1877. During the year 10,000*l.* in light gold coin was received for re-coinage.

Worn British silver coin of the nominal value of 3,977*l.* 3*s.* 6*d.* has been withdrawn from circulation in New South Wales, and the loss thereon made good in the usual manner by drafts on the Master of the Mint.

The bronze coin sold to the public amounted to 735*l.*, of which 560*l.* was in pence and 175*l.* in halfpence.

In the Melting-house and Refinery 365,174 ounces of rough gold were melted into bullion, of which 347,328 ounces were afterwards refined by chlorine gas, producing 295,965 ounces of refined gold and 45,942 ounces of silver, the average assay of the gold being 996·5 and that of the silver 940·6. The refined gold was subsequently alloyed with copper, and cast into ingot bars weighing 336,490 ounces, which, together with 528,186 ounces of scissel bars, making a total of 864,676 ounces of standard bars, were passed in for coining.

The average assay of the ingot bars was 916·76, and of the scissel bars 916·77. The highest and lowest individual reports being respectively, ingot, 917·15 and 916·32, and scissel 917·20 and 916·37.

Since the middle of the year, the bars for coinage have been cast in moulds of the form recommended in the Report of the Deputy Master on European Mints,* one part only of the mould being recessed, and the cover plain. These have been substituted for the T section reversing moulds previously in use, and the bars have been more uniform in width, while the expense of preparing the moulds has been considerably lessened.

From the 1st October the alloy for standard bars has been poured under a jet of coal gas, on the recommendation of Mr. Miller, of the Melbourne Mint, and although the toughness of the metal does not appear to have been sensibly affected, the surface of the bars has been so much improved that it has been considered advisable to continue the use of the process.

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* Parliamentary Paper, No. 466, Session 1870, p. 32.

In the Assay Department the number of assays made has been as follows:—

Standard gold - - - - -	2,026
Rough „ - - - - -	2,772
Refined „ - - - - -	540
Parting assays - - - - -	2,772
Silver (wet process) - - - -	114

making a total of 8,224 assays in each of the two Offices, besides checks, and 32 mineral analyses reported in duplicate. Fifteen samples of quartz were also crushed and amalgamated under the superintendence of the Senior Assayer.

The process of refining gold by means of chlorine gas having now been in use for the last ten years, a few particulars respecting the results obtained may be interesting. The chlorine process was discovered in 1868 by Mr. F. Bowyer Miller, then one of the Assayers to this Branch, and now Superintendent of the Bullion Office in the Melbourne Mint. It was introduced here on a practical scale in 1869, when over 200,000 ounces of gold were treated; since then it has been applied to the whole of the gold brought to the Mint for coinage, with the exception of such small quantities as had been previously refined. The total weight of gold operated on has amounted to more than 4¼ million ounces, and the value of the silver extracted and sold to 103,000*l.*, of which 21,544*l.* has been paid over as revenue, and the remainder to the owners of the gold.

The average assay of the refined gold, which in 1869 was 993·1, is now 996·5, at which point it has been for the last three years. These results have been obtained with comparatively little expense, while the introduction of the process has been in many ways of the greatest advantage to the successful working of the Mint.

1,259,000 sovereigns, and 126,000 half-sovereigns, were coined and issued during the year. Double assays are made on all coin in the proportion of one to every 2,500 issued. The average assay report was 916·74, the highest being 917·20, and the lowest 916·30.

The average weight of the sovereigns issued was 123·269 grains, and of the half-sovereigns 61·638 grains, while out of 234 pieces carefully sampled from sovereigns issued between the 1st July and the 31st December, the heaviest weighed 123·45 grains, and the lightest 123·09 grains, the standard weight being 123·27 grains, and the remedy $\frac{2}{10}$ths of a grain.

Early in the year the working remedy was slightly increased. The method of weighing adopted is as follows: four of the six automaton weighing machines are set to a remedy of $\frac{17}{100}$ths of a grain, and are used for the mixed blanks as they come from the cutters; the rejected work from these four machines is weighed over again, the heavy blanks in No. 5 machine set to throw out pieces $\frac{19}{100}$ths of a grain heavy, and the light blanks in No. 6 machine set to throw out pieces $\frac{18}{100}$ths of a grain light. This arrangement appears to have worked very well, as shown by the weight of the samples before alluded to.

Since the introduction in the Melting-house of the new moulds for standard gold, the process of annealing fillets has been entirely discontinued. The bars as received from the Melter are about 24 ins. long by 1½ ins. wide, and $\frac{7}{16}$ ins. thick. They are "broken down" to a width of 1¼ ins. by seven successive pinches, the subsequent rolling being comparatively easy and progressive. The practice of pouring through coal gas appears to have considerably improved the surface of the fillets, which are now perfectly free from stains.

Some modifications in the process of cleaning and annealing the blanks have been introduced since the middle of the year. The cut and greasy blanks are placed in a perforated brass cylinder, which is revolved successively in a bath of strong caustic soda solution and two baths of hot water. The water is then run off from the last bath, and the rotary motion continued until the blanks are perfectly dry. They are then cooled on a bright iron table, when they are ready for the automaton machines. The standard blanks are marked, and then annealed in wrought-iron tubes closed with a plumbago plug well fitted to the inside of the tube, and with an iron cover outside. The

sawdust for drying the blanks, and the clay for luting the tubes, have been entirely dispensed with, and the finished blanks are perfectly clean, and entirely free from any particles of dirt likely to interfere with the impression of the die in the final process of coining.

In obedience to the request of the Master of the Mint, conveyed in your letter of the 23rd November 1877, I took charge of this Branch of the Royal Mint on the 14th January 1878, relieving Mr. Elouis, who sailed for England on the 16th of the same month.

It is with great regret that I have to record the death of three officers of this Department during the past year—Mr. Joseph Trickett, formerly Superintendent of the Coining Department, and lately in the receipt of a retired allowance; Mr. W. F. Gibson, late Senior Clerk and Coiner; and Mr. H. K. Kelly, B.A., late Junior Clerk. On the death of Mr. Gibson, the Lords Commissioners of Her Majesty's Treasury were pleased to approve of the abolition of the office of Senior Clerk and Coiner, and of the division of the duties among some of the other officers, with increase of pay, and also of the appointment of Mr. Kelly to the office of Assay Clerk and Assistant, with an allowance of 50*l.* per annum in addition to his salary. Since Mr. Kelly's death, this appointment has been conferred on Mr. E. H. Arnheim, the next in seniority. These arrangements have been found to work most satisfactorily, and, while the efficiency of the Department has been in no way impaired, a considerable saving has been effected in the expenditure for salaries.

A Junior Clerkship having become vacant by the death of Mr. Kelly, applications for the appointment were invited in accordance with the regulations approved by the Lords Commissioners of Her Majesty's Treasury. Twenty eligible candidates presented themselves in answer to the notices in the local papers, and their names were submitted for classification to the Professors of the University of Sydney. The Registrar reported that, after examination of their merits, the first place had been given to Mr. Arthur Polglase Fletcher, who has therefore been appointed on probation for six months from the 1st December last.

The only other changes in the establishment have been the resignations of George Shepperd and W. Holmes, and the appointment of T. R. Goldfinch and Alfred J. Hill, both sons of employés in the Department.

During the year 274 orders of admission were issued, and 1,234 visitors admitted to view the works.

The unexpended balance of the Mint grant for 1877, amounting to 2,701*l.* 3*s.* 6*d.*, was paid to the Hon. the Colonial Treasurer on the 3rd August.

In consequence of the falling off in the gold receipts, the revenue for the past year has been only 9,810*l.* against 10,903*l.* in 1877. The expenditure has been 12,063*l.* 1*s.* as against 12,320*l.* in the previous year.

The usual Return of receipts and issues is appended.

I have, &c.
ROBERT HUNT,
Deputy Master.

The Deputy Master,
Royal Mint, London.

Royal Mint, Sydney Branch.

Return of the Weight and Value of Gold received for Coinage; of the Value of Gold Coin and Gold Bullion Issued; and of the Revenue derived from Mint Charges, &c., from the opening of the Mint on the 14th May 1855 to the 31st December 1878.

Year.	Gold received for Coinage.		Gold Coin and Gold Bullion Issued.					Revenue.				
			Gold Coin.			Gold Bullion.	Total.	From Mint Charges.		From Silver.	From other Sources.	Total.
	Gross Weight.	Value of the Gold at £3 17s. 10½d. per oz. standard.	Sovereigns.	Half-sovereigns.	Total.			On New South Wales Gold.	On Foreign Gold.			
	ozs.	£ s. d.	£	£	£	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1855 } 1868 }	6,820,197·92	26,725,562 19 11	23,495,500	1,552,500	25,048,000	1,647,156 3 4	26,695,156 3 4	185,370 14 8	69,264 2 9	2 16 7	27,290 6 5	281,928 0 5
1869	346,003·94	1,323,487 8 3	1,202,000	77,000	1,279,000	40,388 2 2	1,319,388 2 2	6,601 13 1	3,023 3 11	4,131 9 4	1,531 19 11	15,288 6 3
1870	317,527·96	1,218,730 4 8	1,220,000	—	1,220,000	23,298 1 9	1,243,298 1 9	4,607 8 11	2,718 17 6	2,911 3 9	1,322 3 4	11,559 13 6
1871	678,627·29	2,887,601 16 5	2,814,000	—	2,814,000	56,418 13 1	2,870,418 13 1	7,316 18 3	7,053 8 5	2,399 16 8	2,117 11 5	18,887 14 9
1872	558'342·45	2,063,774 12 10	1,815,000	178,000	1,993,000	98,728 2 1	2,091,728 2 1	9,539 19 5	3,276 17 4	2,093 6 7	2,879 1 3	17,789 4 7
1873	436,624·91	1,611,940 17 1	1,478,000	—	1,478,000	50,963 1 5	1,528,963 1 5	7,234 10 10	2,489 3 6	996 9 5	1,666 15 6	12,386 18 9
1874	551,046·65	2,073,666 19 11	1,899,000	126,000	2,025,000	11,611 12 8	2,036,611 12 8	6,725 6 9	4,538 8 8	1,096 13 11	1,753 18 10	14,114 8 2
1875	547,484·68	2,061,070 16 5	2,122,000	—	2,122,000	6,517 6 0	2,128,517 6 0	5,714 15 10	4,297 14 8	2,111 5 6	1,441 15 11	13,565 11 11
1876	431,905·27	1,605,557 19 8	1,613,000	30,000	1,643,000	8,292 17 4	1,651,292 17 4	3,941 8 10	3,687 10 5	1,179 10 10	1,687 14 1	10,496 4 2
1877	438,385·50	1,608,248 2 8	1,590,000	—	1,590,000	6,656 18 7	1,596,656 18 7	3,316 9 11	3,691 11 8	2,612 3 4	1,282 14 9	10,902 19 8
1878	365,173·89	1,308,898 1 5	1,259,000	63,000	1,322,000	6,276 5 8	1,328,276 5 8	2,944 3 9	2,888 18 11	2,012 3 2	1,964 14 2	9,810 0 0
Total	11,591,320·46	44,488,539 19 3	40,507,500	2,026,500	42,534,000	1,956,307 4 1	44,490,307 4 1	243,313 10 3	106,929 17 9	21,546 19 1	44,938 15 1	416,729 2 2

Year.	Countries in which the Gold was Produced.									
	New South Wales.	Queensland.	New Zealand.	Victoria.	Tasmania.	South Australia.	New Caledonia.	Other Countries.	Coin.	Total.
	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.
1855 } 1868 }	4,084,006·82	229,563·41	1,256,563·58	1,225,872·64	2,187·90	—	—	2,487·05	19,543·52	6,820,197·92
1869	179,549·24	97,469·31	64,628·76	203·73	—	—	—	—	4,082·90	346,003·94
1870	143,709·44	85,337·76	53,090·39	31,603·23	—	—	—	—	3,787·14	317,527·96
1871	242,596·91	143,375·34	237,119·18	148,701·17	1,104·74	—	353·65	—	5,376·30	778,627·29
1872	331,273·19	133,981·05	55,980·16	30,960·64	2,202·79	—	2,425·54	—	1,519·08	558,342·45
1873	259,579·77	151,096·31	23,208·82	—	197·02	—	1,978·22	—	564·77	436,624·91
1874	233,216·59	293,554·16	23,369·27	51·04	—	75·99	443·90	—	335·70	551,046·65
1875	226,985·50	297,441·20	21,984·98	60·08	—	156·19	—	—	856·73	547,484·68
1876	153,581·48	262,177·11	14,245·62	—	—	211·02	429·92	—	1,310·12	431,905·27
1877	121,593·38	310,246·68	1,674·00	132·74	—	822·15	373·95	—	3,542·60	438,385·50
1878	107,347·97	234,722·65	16,008·97	72·34	27·21	464·57	2,338·84	253·69	3,937·65	365,173·89
Total	6,083,390·29	2,238,937·98	1,767,943·73	1,437,657·61	5,719·66	1,729·92	8,344·02	2,740·74	44,856·51	11,591,320·46

No. XII.

Report of the Deputy Master of the Melbourne Branch of the Royal Mint for the year 1878.

Sir, Melbourne, 14th February 1879.

I have the honour to submit for your consideration my Report on this Branch of the Royal Mint for the year 1878.

The coinage of the year has been 2,171,000*l.*, all in sovereigns, being the largest coinage in any one year since the establishment of this Branch of Her Majesty's Mint, exceeding that of the year 1877 by 644,000*l.*, and that of 1876, in which the largest previous coinage took place, by 47,000*l.*, in spite of the fact that the production of gold in Victoria is gradually decreasing, and that it is estimated that less gold by about 51,000 ounces was produced in the Colony during 1878 than during 1877. The gold raised in 1878 is estimated at 758,040 ounces. The amount raised in 1877 was estimated at 809,653 ounces.

The gold received for coinage amounted to 569,932·17 ounces.

The weight of gold refined was 548,298·51 ounces, from which there were recovered 22,835·56 ounces of silver.

17,428·47 ounces of silver were sold during the year to jewellers and others, and 9689·90 ounces remain in store.

The weight of standard gold bars prepared and passed into work was 939,890·52 ounces.

The per-centage of good work has improved during the past year, and amounted to an average of 59·3 per cent., as against 55·2 per cent. in 1877.

The revenue has been 8,572*l.* 5*s.* 4*d.*, which has been paid into the Colonial Treasury. The revenue for 1877 was 6,514*l.* 5*s.* 9*d.*

The saving on the Mint Annuity for 1877, viz., 7,070*l.* 17*s.* 1*d.*, has, in accordance with your directions, been paid into the Colonial Treasury. The saving on the Mint Annuity for 1878 has been 6,349*l.* 12*s.* 7*d.* The net cost to the Colony of Victoria of the establishment for 1878 has been 5,078*l.* 2*s.* 1*d.*, against 6,414*l.* 17*s.* 2*d.* in 1877.

Appendix "A." New regulations for the receipt of gold and issue of coin, copy of which I enclose, have been approved by His Excellency the Governor in Council. I trust that the advantages offered by them to the holders of gold will tend to increase the business of this Department.

I cannot conclude this Report without calling your attention to the state of the silver currency in this Colony, which is deficient in quantity and much defaced by wear. There is no stock in my hands to renew the worn coin, or to supply the deficiency in its quantity.

Appendices "B." and "C." Appendices "D." and "E." I append to this Report statements of the work performed in the Operative Departments during the year 1878, together with the usual annual tabular statements.

I have, &c.

The Right Honourable
The Master of the Mint, London.

V. Delves Broughton.

APPENDIX "A."

Mint Regulations.

The following regulations respecting the receipt and coinage of gold at the Melbourne Branch of the Royal Mint, to be substituted for those approved by Order in Council of the 19th April 1875, have been issued by His Excellency the Governor in Council.

Graham Berry,
Treasurer.

Treasury, Melbourne,
7th October 1878.

Regulations for the Receipt and Coinage of Gold at the Melbourne Branch of the Royal Mint.

Gold, in dust or bullion, can be deposited at the Mint for coinage, subject to the following charges, allowances, and conditions :—

Charges.

1. For a deposit containing 1,000 ounces of standard gold or over, 1½*d.* per ounce on the gross weight of the deposit before melting.
2. For a deposit containing less than 1,000 ounces of standard gold, 2*d.* per ounce on the gross weight of the deposit before melting; provided that 4*s.* shall be the minimum charge for any one deposit.

Allowances.

1. Any silver in a deposit in excess of 4 per cent. of the weight of the deposit after melting will be allowed for at a rate per ounce fine, to be fixed periodically by the Deputy Master.
2. A reduction of one sixth of the above charges will be made on all deposits of unrefinable gold containing more than 24 ounces standard.

Gold will be considered unrefinable that contains silver in less proportion than four and one half (4½) per cent. of the weight of the deposit after melting, and less than two (2) per cent. of base metal.

Mode of Payment.

On and after 1st January 1879 the following arrangement as to payment for deposits will come into operation.

Provided that a day's notice be given of the intention to bring gold for coinage, payment for deposits will be made in coin over the Mint counter, as specified below (excepting when holidays intervene), viz. :—

For deposits exceeding 1,000 ounces standard	Payment of not less than one half the value of the deposit will be made, if desired—
Before noon on—	
Monday - -	At 2 p.m. on Tuesday in the following week.
Tuesday - -	„ 2 „ Wednesday „ „
Wednesday - -	„ 2 „ Thursday „ „
Thursday - -	„ 11 a.m. on Saturday „ „
Friday - -	As if deposited on the following Monday.

The balance of the value will be paid as soon as possible afterwards. Even thousands only will be paid in coin, the complementary portion by cheque.

N.B.—These arrangements respecting payment will be carried out as far as possible, but the Deputy Master cannot be held responsible for their absolute performance in case of accident to the machinery, or should unusually heavy deposits be made on one day. In this latter case preference will be given to the earlier depositors.

Deposits made under any other circumstances than the above will be paid for as at present, by cheque, as also all deposits made on the first working day, or during the last 10 days, of each quarter.

Conditions.

1. Each parcel for which a separate assay is required shall be considered as a separate deposit: Provided always, that the value of all deposits shall be determined upon the report of the Assay Department of this Branch of Her Majesty's Mint, which shall be final, and that the Deputy Master may refuse any deposit which he may deem unsuitable for coinage, and that it shall be in his discretion to make exceptional arrangements in cases in which he may consider it desirable to do so for the advantage of the public service.

2. The receiving office at the Mint will be open daily for the receipt and issue of bullion from 11 a.m. to 3 p.m., except on Saturdays and holidays, and on the last two working days of March, June, September, and December.

NOTE.—Gold and silver bullion, in ingots or bars, can be obtained at the Mint to a limited extent, gold at 3*l.* 17*s.* 10½*d.* the ounce standard, and silver at such price as the Deputy Master may think proper to accept. Not less than 5*l.* worth of either metal will be sold at one time.

Gold coin which has become light after issue from the Royal Mint or any of its Branches will be received at the Mint in parcels of not less than 50*l.* nominal value, at 3*l.* 17*s.* 10½*d.* per ounce.

Approved by the Governor in Council the 7th October 1878.

ROB. WADSWORTH,
Clerk of the Executive Council.

APPENDIX "B."

MELTING AND REFINING DEPARTMENT.

During the year 1878, there were received for melting into ingots, and for assay, 1,049 deposits of gold weighing 569,932·17 ounces.

548,298·51 ounces of gold bullion, containing 27,136·98 ounces of fine silver, have been refined; and 516,279·74 ounces of refined gold, of an average assay of 995·3, have been delivered to the Bullion Office, together with 24,502·07 ounces of silver, equal to 22,835·56 ounces fine.

570,383·442 ounces of standard gold have been melted into ingot bars, and 380,310·555 ounces of scissel, making a total of 950,744·997 ounces cast into bars for coinage.

For some time past a slight roughness at the edge of the fillets produced from standard bars has been met with, which, though a defect of a minor character, it was considered desirable to overcome, and experiments have been made with this object in view. The refined gold from which the standard bars were prepared was quite tough, and could be rolled to any extent without any appearance of roughness at the edge, and could be bent backwards and forwards an indefinite number of times without breaking. It was therefore evident that the roughness of edge must be occasioned by the metal used for alloy. It seemed probable that the copper used for the purpose contained traces of some foreign metal, such as lead, bismuth, or antimony. With a view of eliminating such impurities, a stream of chlorine gas was passed through the molten copper before using it as alloy, but the bars produced by the resulting metal still presented the same defect. The effect of passing a stream of chlorine through the molten standard gold, before passing it into bars, was next tried, but still without the desired improvement. A jet of coal gas was then thrown on the stream of molten gold as it was poured into the bar moulds. This was found to produce a decided improvement, but did not in all cases completely overcome the difficulty. As it was probable that the improvement arose from the de-oxidizing effect of the gas flame, presumably by its reduction of copper di-oxide, it was assumed that, if this di-oxide were more effectually eliminated, a better result would be obtained. The copper intended for alloy was therefore melted under charcoal, and poured into closed skillet moulds, through which a stream of coal gas was passed. The gold alloyed with copper thus treated has given very satisfactory results.

During the past year the following alterations and additions have been made to the melting and refining plant:—

1. Three new furnaces have been added to the Refining Department, which, with the same number of men as before, enables it to refine, between 9 a.m. and 2 p.m., at least 9,000 ounces. In times of pressure nearly twice this amount has been refined in one day by working about two hours overtime.

2. A series of iron bars have been placed across the inside of the main chimney shaft, so as to form a ladder from top to bottom, and allow a man to pass up to the top and cleanse it thence downwards. From the first sweeping 2·49 ounces of standard gold, and 4·47 ounces of fine silver, were recovered.
3. In order to promote the condensation of the fumes passing away during the refining operations, and to arrest fine particles of the precious metals which might be carried upwards by the draught, an arrangement has been fixed about 30 feet up the chimney, by which a fine spray of water is allowed to fall to the bottom of the shaft.
4. A new pan has been provided and fitted to the Chilian mill, to replace the old one, which had been in use since the opening of the Mint, and the bottom of which had been worn too thin to be longer trusted.

APPENDIX "C."

Coining Department.

Memorandum of Alterations of Machinery during the year 1878.

1. *Coining-Presses.*—The coining-presses, as originally designed, were very defective. This was made disagreeably manifest in the year 1878 by the strain put upon them through the increase of work. The point in which their faulty nature showed itself most was in the action of the depressing lever on the collar. This was a radius action, and consequently the lever was no guide to the collar as far as the back and front were concerned, but only on each side. The collar was therefore free to rise and fall out of level in two directions, and no reliance could be placed on its working properly. Mr. Bint, Foreman of Machinery, designed what has, after trial, proved to be a very great improvement. The collar is depressed by two steel slides, which are guided in V's down each side of the bed, and which have a bearing of two inches in length on each side of the collar. The result is that the collar is always kept at a level, and the feeding and delivering are in consequence easier and more certain.

Other alterations made are the replacing of the old steel knuckles and ram by new ones. New steeling has been put in the slides. The fly-wheels and loose pulleys have been re-bored and bushed with gun-metal, and the clutches have been refitted with new steelings. The whole of the presses have not yet been altered. Two have been refitted and strengthened throughout; the other two are in course of alteration. But there are defective parts in all of them which it is impossible now to remove. Since the alterations mentioned above in the depressing levers, and the change in the shape of the reverse die, the collars have done 90 per cent. more work. The dies, also, stand better, and are easier to work.

2. *Automaton Balances.*—In order to ensure as great accuracy as possible in the issues of coin from the Mint, the coin is now re-weighed after being struck, in addition to the usual weighing which is made after the blanks are cut out. As there are not sufficient automaton balances in the Department to perform this extra work, two have been ordered from England, and a third has been bought here. This was what is called a "Bank balance," and merely separated pieces into two divisions, distinguishing only the light coins from those which were either of standard weight or over it. It was therefore altered in the Mint workshops so as to weigh like the others, and to separate the light, standard, and heavy blanks from each other. The boxes under the machine for receiving the coins after being weighed have been detached from the balance itself, and are supported on cast-iron brackets fixed in the floor. This saves the balance from being jarred, when shutting up the boxes after taking out the weighed work. Other minor alterations were made in the machine, such as putting in

a new 3-speed gun-metal pulley and shaft, putting three receiving boxes in place of two, and making the new steps to the shoot-angle of the cam more acute, to enable the levelling-rod to lift higher. This machine has been used now for some months to check sovereigns, and is found quite equal to those originally obtained. Water has been laid on, and foundations made, in preparation for the two other machines to come.

Comparison of Operations between the Years 1877 and 1878.

Particulars.	1877.	1878.
	ounces.	ounces.
Bars received for coinage	724,629·77	939,890·52
Sovereigns struck from coinage	382,053·28	557,562·58
Half-sovereigns „ „	10,526·61	—
Scissel from coinage	332,043·66	372,310·74
Loss in coining	6·22	17·20
Proportion of sovereigns turned out on amount operated on	·5525	·5932
Proportion of blanks cut from bars	·6808	·7085
Proportion of good blanks from blanks cut	·8143	·8400
Proportion of loss on amount operated on	·000009	·000018
Proportion of loss on out-turn of coin	·000016	·000308

The apparent increased loss during 1878 arises from the fact that the scissel has been delivered for remelting freer from grease than hitherto, so that the loss in the Coining Department appears greater, and that in the Melting-house is proportionately less.

APPENDIX "D."

RETURN of the Quantity and Value of Gold received for Coinage at the Melbourne Branch of the Royal Mint; of the Gold Coin and Gold Bullion issued therefrom; and of the Revenue derived from Mint Charges, &c., from the opening of the Mint on 12th June 1872 to 31st December 1878.

Period.	Gold received for Coinage.		Issued.						Revenue.		
			In Coin.			In Bullion.		Total Value of Coin and Bullion.	From Mint Charges on Gold.	From Sale of Silver and other Sources.	Total Revenue.
	Gross Weight.	Value of Gold at 3*l.* 17*s.* 10½*d.* per oz. standard.	Sovereigns.	Half-sovereigns.	Total Value.	Quantity.	Value.				
	oz.	£ s. d.	No.	No.	£	oz.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1872*	190,738·14	764,917 6 9	748,000	—	748,000	1,205·468	3,610 9 7	751,610 9 7	2,655 19 11	1,289 6 6	3,945 6 5
1873	221,870·44	887,126 15 6	752,000	165,000	834,500	3,166·002	11,035 6 6	845,535 6 6	3,492 10 8	1,628 17 3	5,121 7 11
1874	335,317·62	1,349,101 17 3	1,378,000	—	1,378,000	2,911·722	10,416 10 0	1,388,416 10 0	4,861 14 9	1,692 17 10	6,554 12 7
1875	439,731·59	1,947,712 14 3	1,888,000	—	1,888,000	3,552·872	13,857 4 8	1,901,857 4 8	4,514 13 0	3,412 17 2	7,927 10 2
1876	543,198·59	2,149,480 17 6	2,124,000	—	2,124,000	3,624·578	14,144 10 1	2,138,144 10 1	3,960 12 4	4,192 12 5	8,153 4 9
1877	378,310·33	1,491,819 4 9	1,487,000	80,000	1,527,000	3,326·060	13,004 4 9	1,540,004 4 9	2,856 5 7	3,658 0 2	6,514 5 9
1878	569,932·17	2,267,430 10 0	2,171,000	—	2,171,000	3,691,093	14,640 4 10	2,185,640 4 10	3,929 3 3	4,643 2 1	8,572 5 4
Total	2,729,098·88	10,857,589 6 0	10,543,000	245,000	10,665,500	21,417·705	80,708 10 5	10,746,208 10 5	26,270 19 6	20,517 13 5	46,788 12 11

*From 12th June, the day the Mint opened to the public.

Countries from which imported:—

Country.	During the Year 1878.	Since the opening of the Mint.
	oz.	oz.
Victoria	422,594·20	2,026,246·03
New South Wales	616·57	2,337·60
New Zealand	113,597·28	584,953·31
Queensland	82·63	1,473·59
South Australia	10,281·90	55,372·99
Tasmania	12,843·76	41,962·01
Natal	446·49	1,362·92
Unknown	9,469·34	15,340·43
Totals	569,932·17	2,729,098·88

Royal Mint, Melbourne,
8th February 1879.

V. DELVES BROUGHTON,
Deputy Master.

APPENDIX "E."

RETURN showing the Amount and Destination of Gold Coin exported from Victoria, and the Amount issued from the Mint, in each Month of the Year 1878.

Month.	To where Exported.						Total Amount Exported.	Amount issued from Mint.	Excess of Sovereigns issued from Mint over Sovereigns Exported.	Excess of Sovereigns Exported over Sovereigns issued from Mint.
	United Kingdom.	N. S. Wales.	New Zealand.	South Australia.	Tasmania.	*Ceylon.				
	£	£	£	£	£	£	£	£	£	£
January -	—	—	—	—	—	35,128	35,128	187,000	151,872	—
February -	—	—	—	—	20,000	72,880	92,880	173,000	80,120	—
March -	—	—	40,600	64,000	—	143,000	247,600	166,000	—	81,600
April - -	—	—	57,000	10,000	—	183,160	250,160	137,000	—	113,160
May - -	—	50	—	26,000	—	248,300	274,350	147,000	—	127,350
June - -	—	—	20,000	—	—	112,750	132,750	141,000	8,250	—
July - -	—	—	20,000	—	—	57,239	77,239	208,000	130,761	—
August -	—	—	—	—	—	160,320	160,320	149,000	—	11,320
September -	—	1,330	—	—	—	239,200	240,530	175,000	—	65,530
October -	—	—	10,000	—	—	359,614	369,614	248,000	—	121,614
November -	25,000	—	—	—	—	93,870	118,870	166,000	47,130	—
December -	—	50,600	30,000	5,000	—	314,300	399,900	274,000	—	125,900
Total -	25,000	51,980	177,600	105,000	20,000	2,019,761	2,399,341	2,171,000	—	—

* The exports of coin to Ceylon are probably for the most part intended for England, as exports by Peninsular and Oriental Company's steamers from Melbourne are entered for Ceylon, and there transhipped.

Royal Mint, Melbourne,
8th February 1878.

V. DELVES BROUGHTON,
Deputy Master.

No. XIII.

REPORT of the COMMISSIONERS appointed to represent HER MAJESTY'S GOVERNMENT at the MONETARY CONFERENCE held in PARIS in August 1878.—(Presented to both Houses of Parliament by Command of Her Majesty.)

TO THE LORDS COMMISSIONERS OF HER MAJESTY'S TREASURY.

May it please your Lordships,

WE have the honour to forward herewith the Procès-verbaux of the International Monetary Conference, held in Paris under the presidency of M. Léon Say, which we were requested to attend by your Lordships' Minute of the 5th August last.

The Conference met at the instance of the Government of the United States, in accordance with the second section of the Act passed by Congress early in the present year, "to authorise the coinage of the standard silver dollar, and to "restore its legal tender character." The words of this section are as follows:—

Origin of the Conference.

"Immediately after the passage of this Act, the President shall invite the "Governments of the countries composing the Latin Union so called, and of "such other European nations as he may deem advisable, to join the United "States in a Conference to adopt a common ratio as between gold and silver "for the purpose of establishing internationally the use of bi-metallic money, "and securing fixity of relative value between these metals."

In the letter which your Lordships caused to be addressed to the Foreign Office on the 20th May last, in answer to the invitation of the United States, it was stated that "the United Kingdom has, since 1816, or for a period of "more than 60 years, confined itself to a single standard of value, viz., gold. "The policy of a single standard has been accepted by Governments of all "parties, and by the people. It has never in fact been seriously attacked, and "without entering on a theoretical discussion, my Lords consider themselves "justified in asserting that both Government and people are satisfied with a "system which has approved itself to them by long experience, and that there "has been and is no expression of public opinion in favour of an endeavour to "establish a common ratio between two metals which vary continually, and "not simultaneously, in value. The question, therefore, to be submitted to "the Conference is not an open question so far as the United Kingdom is "concerned."

Your Lordships, therefore, considered that, as there was no ground for concerted action between the Government of Her Majesty and that of the United States, it would hardly be consistent with the respect due to a friendly Government if Her Majesty's Government were to enter the Conference on the conditions laid down in the Act, which involved, not the discussion, but the adoption of the principle of bi-metallic money.

Your Lordships, however, subsequently received a communication from the Secretary of State for India in Council, in which it was stated that, considering the important bearing of this question on the interests of India, his Lordship would be glad to learn that Her Majesty's Government had decided to take part in the proposed Conference; and your Lordships, therefore, consented that this country should be represented, provided that the terms of the invitation were so far modified as to allow the free discussion in all its bearings of the subject of the standards of currency used in various countries and the relations which exist or can be established between them, it being clearly understood that England could in no way depart from the policy in respect to currency questions which she has pursued for the last 60 years.

Acceptance by Her Majesty's Government of invitation

The Government of the United States having accepted the representation of Her Majesty's Government upon these terms, your Lordships were pleased to request us to proceed to Paris in order to represent Her Majesty's Government at the International Conference on Bi-metallic Currency which met in August

from United States.

last. The understanding with regard to our taking no part in any vote which would place in question the maintenance of a single gold standard in England was of course embodied in our instructions.

The distinct limitation thus imposed on our proceedings at the Conference did not, however, preclude us from taking an active part in its deliberations. For, in the first place, our position with regard to the Indian Empire, where the silver standard prevails, and with regard to which we were not bound as we were in the case of England, gave us a most important locus standi, and the deepest interest in any discussions involving the future of silver; and in the next place, we found that the representatives of several other Governments were, similarly with ourselves, distinctly precluded from voting on any proposition which would involve changes in the currency laws of the countries which they represented.

Opposition of the Scandinavian Union, Belgium, and Switzerland to the proposals of the United States.

While, therefore, the United States had called the Conference together with a view to common action being taken, it was clear, at the very commencement of our proceedings, that, with few exceptions, the countries of Europe were convinced, even before our sittings were opened, either of the inexpediency or of the impossibility of the course which was recommended by the United States. Declarations were accordingly soon made by the representatives of various Governments making it at once apparent that the Conference would have no practical result.

Dr. Broch (Norway) was the first to declare that the Governments of Sweden and Norway, who were committed to the single gold standard, had accepted the invitation of the United States on the same terms as those on which Her Majesty's Government consented to nominate your Commissioners.

M. Pirmez (Belgium) and M. Feer Herzog (Switzerland), representing countries included in the Latin Union where the double standard still exists in a modified form, had received the most stringent instructions not to commit themselves in any way to the ultimate maintenance of silver as a standard in their respective countries.

Expectant attitude of Austria and France.

Other Governments, such as that of Austria, had instructed their representatives to state that they intended to maintain an expectant attitude, and when France, the leading country in Europe amongst those where the silver currency has not been demonetized, also declared in favour of an expectant attitude, it was perfectly clear that all prospect of any common action for the "rehabilitation of silver," such as was desired by the United States, was out of the question even among a limited group of nations.

Germany was not represented at the Conference. Her abstention (to which we shall have to refer hereafter) naturally increased the difficulty of arriving at any understanding. The representatives of the United States were most loth to recognise this position. To the very close of the Conference, supported by Italy alone, they pleaded on behalf of common action as if it were an open question, and when compelled to acknowledge that action was impossible, urged at least a common theoretical declaration in favour of such action, though the instructions of the majority clearly precluded such a course. But in view of the circumstances which we have detailed, most of the members of the Conference perceived at once that no definite result could be obtained, and that it only remained to exchange opinions, and to collect all possible information as to the intentions and policy of the Governments represented with regard to the monetary circumstances of their respective countries as affected by the fall of silver.

We have great satisfaction in stating that in this respect the most perfect frankness prevailed, all members of the Conference vying with each other in contributing materials of common interest, and in stating, without reserve, how their Governments viewed the position.

We had the advantage not only of obtaining information during the debates of the Conference, but also of exchanging private communications with the delegates from the different countries. We trust that the information thus collected, especially as to the probable future policy of various states with regard to the silver question, may not be without some interest.

Currency systems of Europe.

The present position of most European countries with reference to a metallic currency is well known to your Lordships. Besides the United Kingdom, Germany and the Scandinavian Union, comprising Sweden, Norway, and Denmark, have completely adopted the single gold standard.

Holland is in a transition state. By a law passed in 1875, a new monetary system was legalised on the principle of a double standard. Gold was valued in relation to silver at 15·625 to 1. Her object was to provide gold for Europe and silver for her Eastern possessions, keeping the same currency in both divisions; as, however, the depreciation of silver made rapid progress, Holland has, since 1875, suspended the coinage of silver, while nominally retaining the double standard.

In the Latin Union, which comprises France, Belgium, Switzerland, Italy, and Greece, the double standard still prevails, gold and silver coins being legal tender for unlimited amounts, though the coinage of silver bullion into coin has been for the present suspended, and Italy, it should be added, having still a forced paper currency, though a member of the Union.

Austria and Russia have also a forced paper currency, but the unit of value is nominally a silver coin.

Accordingly, at the present moment, there is an important group of nations with a single gold standard, an important group of nations with a double standard, and a third group of nations which originally had a silver standard but now have a forced paper currency.

No European country represented at the Conference has a metallic currency with a single silver standard at present, but both the United Kingdom and Holland have Eastern possessions in which a silver currency alone exists.

The United States of America are in a transition state, about to resume specie payments, and to resume them on the footing of a double standard, but with limitations as to the amount of silver which is to be coined.

Such are the actual circumstances of the various nations.*

Position of the several States with regard to the silver question.

We proceed to describe the attitude which they appear to have assumed in regard to the silver question.

The countries which have adopted a single gold standard, and have no Eastern possessions, have clearly made up their minds. Germany, it was understood, declined even to attend the Conference lest her attendance should be interpreted as a sign of wavering as to the policy to which she had committed herself. In the Scandinavian Union any deviation from the course adopted in 1873 seems equally out of the question.

Germany and the Scandinavian Union.

In Holland the position is far more complicated. Her Government are feeling the difficulty caused by the currency of her Eastern provinces most acutely, and are apparently watching the course of the English Government in relation to India, with a view to examine whether it may afford a practical solution for their own adoption under analogous circumstances. Holland is therefore inclined to maintain an expectant attitude, but according to the opinion expressed by her representatives she has become convinced that a single gold standard is most suitable to her as a European nation, although a single silver standard may be right or necessary in her Eastern possessions. Her proximity to Germany, and her intimate commercial relations with that gold-using country, have brought this conviction forcibly home to her.

Holland.

The attitude of the countries comprising the Latin Union is particularly interesting. Though bound together by existing conventions they are at present actuated by the most divergent opinions.

The Latin Union.

Your Lordships are aware that in 1873, in view of the depreciation of silver which then first threatened to deprive the countries forming the Latin Union, whose currency was based on a double standard, of the gold which had for many years been the chief metal in use, the Swiss Government invited the other Powers to join in a Conference. The meetings held in 1874, 1875, and 1876, resulted in a limitation of the coinage of five-franc pieces, which in the latter year was restricted to 120 millions of francs, allotted in various proportions to the five States composing the Union. In 1877, on the proposal of France, it was arranged by correspondence that this quantity should be reduced by one half, and in 1878 the coinage of silver money of full value was entirely stopped, except that Italy was permitted to recoin the demonetized silver of the petty States to the amount of 10 millions of francs. But though these

* Spain and Portugal were not represented at the Conference. Spain has adopted the currency of the Latin Union though without entering the Convention, and has suspended the free coinage of silver from the 1st May last. The monetary system of Portugal is based on gold alone.

France. measures have been taken by common accord, the views of the ultimate solution held by the various members of the Union differ most materially. The French Government appears to believe, and evidently hopes, that after a lapse of time silver may so far recover its value and assume a steady relation to gold, that France may be able to return to the normal action of a double standard, which is at present interrupted by the suspension of the free coinage of silver five-franc pieces. But as it is obvious that it is impossible to allow the free coinage of silver at the ratio of 1 to 15·5 without the certainty of losing all the gold in the country, the present policy of the French Government is to maintain the status quo. It will be observed that the Minister of Finance, at the third meeting of the Conference, stated that while unable to accept the proposals of the representatives of the United States, he would be unwilling positively to reject them, and this statement fairly represents the present attitude of France, and is in accordance with the statements made by M. Dumas, who presided over the meetings of the Latin Union in 1876.

Belgium and Switzerland. At that Conference Switzerland had already advocated the adoption of the single gold standard; Belgium appears to be strongly disposed in the same direction; and it is likely that these countries will take advantage of the first favourable opportunity to legislate in that direction. The Latin Convention continues in force until the 1st January 1880, and is terminable then, and at intervals of 15 years, at one year's notice. Conferences have, however, been in progress among the members of the Union since we left Paris, which appear likely to result in some temporary prolongation of existing arrangements, the suspension of the coinage of silver five-franc pieces being continued. It is not probable that Belgium or Switzerland will be able to carry out their wish for a single gold standard for some time to come.*

Greece. The Greek Government had directed their Chargé d'Affaires to attend the Conference, and to state that Greece was not prepared to depart from the present expectant policy of the Latin Union.

Italy. The remaining nation which forms part of that Union, viz., Italy, has a forced paper currency. Her opinion appears to be that it would probably be easier to resume specie payments upon the basis of a double standard than upon the basis of gold alone, and upon that ground she is not disinclined to the principles submitted by the United States. The representatives of Italy were indeed the only members of the Conference who gave an eager support to the proposals of the American delegates, and your Lordships will observe that they alone declined to accept the resolutions framed in answer thereto, and that they placed upon record their opinions in favour of the double standard, and of the adoption of an international ratio between gold and silver. It may be worth observing that a large amount of Italian subsidiary silver is said to be held in the Bank of France, and as this token coinage must be redeemed by the issuing country, it will be seen that France possesses a powerful means of exercising influence over Italy in matters of currency.†

Austria. Austria, though, like Italy, having a forced issue of paper money, appeared to be more inclined to follow an expectant attitude and less disposed to cast in her vote at once with the Bi-metallists. The consideration that it would be obviously cheaper and easier to resume specie payments in silver, which is now at a very small premium as compared with paper, has evidently great weight with her, On the other hand the proximity of Germany, with whom Austria transacts four-fifths of her commerce, points to the advantage of the adoption of a monetary system based upon gold alone. Such a transition could not, however, be effected without cost; and the Government appears to be favourably inclined to the use of both metals.

Russia. One other country which has no metallic circulation was represented at the Conference, viz., Russia. Her monetary system, like that of Austria, is nominally based upon silver, but the opinions expressed by her representative were decidedly opposed to a bi-metallic system.

Your Lordships will, therefore, perceive that while Germany and the Scandinavian Union adhere to the principles which they have so recently

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* Since the above paragraph was printed a fresh Convention has been concluded. We add it to the Appendix.

† Vide Article 8 of the new Convention.

adopted, Holland, Belgium, and Switzerland appear also to be decidedly in favour of the single gold standard; that France appears to be in favour of a double standard, but is not prepared, under the present circumstances, to resume the free coinage of silver; that Greece maintains a similar attitude; and that, of the countries having a forced paper currency, Austria and Italy appear to be inclined towards the employment of the two metals as being more likely to lead to the resumption of specie payments, while Russia remains faithful to the principle of a single standard.

Such, broadly speaking, was the situation at the time when the Conference met, and it will be seen at once that it was not propitious to the policy which the United States Delegates had been sent to Europe to advocate. These gentlemen did not in the first instance seem inclined to submit any distinct proposals. Alleging their reluctance to appear intrusive, they deprecated being pressed to put any programme before the Conference. But it was pointed out to them that, having issued the invitation to the Governments to send delegates to Paris, it was clearly their part to open the discussion. On this, not without some further apologies, they placed the following broad propositions before the Conference :—

Resolutions moved by the Delegates from the United States.

1. *It is the opinion of this assembly that it is not to be desired that silver should be excluded from free coinage in Europe, and the United States of America. On the contrary, the assembly believes that it is desirable that the unrestricted coinage of silver, and its use as money of unlimited legal tender, should be retained where they exist, and, as far as practicable, restored where they have ceased to exist.*

2. *The use of both gold and silver as unlimited legal tender money may be safely adopted—*

First. By equalising them at a relation to be fixed by international agreement.

Secondly. By granting to each metal, at the relation fixed, equal terms of coinage, making no discrimination between them.

Opening speech of Mr. Groesbeck.

Mr. Groesbeck was the spokesman who introduced these resolutions. The speech which he delivered on the occasion was not directed to making good the propositions contained in the resolutions. Mr. Groesbeck did not deal with the question as to the possibility, either scientific or practical, of establishing an international agreement "by which the use of both gold and silver as unlimited legal tender may be safely adopted." He confined himself mainly to an explanation of the position and attitude of the United States Government, and, anticipating the objections, firstly, that that Government might be supposed to be influenced by their interest in the newly-discovered silver mines in Nevada, and secondly, that it might be thought somewhat remarkable that whereas gold had been made the standard by a law passed in 1873, the double standard was now introduced in 1878, he deprecated in strong terms the idea that, because the United States were a silver-producing country, they had, as a State, any interest special to themselves in the monetary question. He pointed to the fact that gold as well as silver was produced in large quantities in the United States, and indicated reasons for his belief that the yield of the Nevada Mines would fall off at an early date. "The remonetisation of silver "was accordingly not an operation undertaken by the United States from "selfish motives, in view of a profit which might be special to themselves, nor "did it involve the introduction of a new practice. From the epoch of their "foundation they had used the two metals. They had lived and prospered "under that system. Since 1792 up to the day when, in 1873, *by a kind of "inadvertence* the silver standard was suppressed, it would be impossible to "quote any merchant, banker, manufacturer, establishment, or indeed any "interest whatever, as having at any time raised an objection against the "simultaneous employment of the two metals. Bi-metallism accordingly is "not only as regards the United States, a legislative tradition, but has entered "deeply into the habits of the people." *

As regards the object of the Conference, Mr. Groesbeck stated it to be to restore to silver its original position ("son rôle primitif"), and "to create a "situation of equality for gold and silver, when coined, in a ratio to be fixed "by common accord."

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* Procès-verbaux, 2me Séance, p. 5.

He also insisted on the firm and unshakeable determination of his country to place itself in the position of a specie-paying State, and on its power to perform its part in any arrangement which might be come to.

Mr. Groesbeck glided very gently over one important feature in the Act of 1878, the strict limitation of the amount of silver to be coined in each month. This Act, as your Lordships are aware, while re-establishing the double standard, does not legalise the free coinage of silver. The reason of this limitation was explained simply to be, that a similar course had been taken by the Latin Union.

Your Lordships will, from these observations, be able to gather the general drift of Mr. Groesbeck's speech. Without the explanations which he gave, it would not have been unreasonable to infer that the locus standi of the United States as regards the silver question was affected by the circumstance that, in 1873, the silver standard was discontinued; that since then the Nevada Mines have become immensely productive, with the result of a most serious fall in the price of silver; that a resumption on the basis of silver, as well as gold, thus offered the double inducement of a cheaper mode, and of a boon to a most important native interest; and that accordingly the policy of 1873 was reversed. However, the statements and explanations of Mr. Groesbeck did not pass unchallenged. M. Feer Herzog questioned the predilection of the public in the United States for the use of silver, and Mr. Goschen and others pressed Mr. Groesbeck on the remarkable allegation that silver could have been discontinued as a legal standard "by inadvertence."

The reply given was to the effect that the general public had been unaware what was passing between the Government and the Legislature; that public attention had not been called to the question, so that the Act was passed by inadvertence, at least on the part of the public.

Reserve of specie and bullion held in United States.

Mr. Goschen also questioned the United States Commissioners with regard to the stock of bullion in hand, held by the United States Treasury, with a view to resumption, and on the proportion of gold and silver respectively comprised in that bullion.

Mr. Fenton stated, in reply, that the Treasury held, according to the latest reports, $167,000,000 in gold and $13,000,000 in silver, of which less than $60,000,000 were hypothecated, leaving over $120,000,000 as a reserve against the greenbacks in circulation, which amount to less than $350,000,000.

We call attention to the very small proportion of silver comprised in this stock. Should the United States resume specie payments on the basis of a double standard, and maintain a portion of their reserve bullion in silver, it is clear that they would have to purchase silver very largely. It may further be presumed that, on the resumption of specie payments, a large stock of bullion will be for a long time held by the Government, and by banks, without being paid out, and it is possible that a large proportion of silver might be thus held without being circulated amongst the public, provided always that the American Commissioners are right in alleging the fixed determination of the United States to abide by a double standard.

Other points in the statements of the United States Representative were vigorously dealt with by other members of the Conference, but the discussion turned almost at once from the arguments put forward by Mr. Groesbeck to the resolutions which he proposed, and to the considerations which could be adduced for and against them. However, as we have already stated, it was palpable at once that the instructions of the members of the Conference, and the intentions of the Governments which they represented, precluded those resolutions from finding much support, and therefore the main question arose as to the wisest attitude to assume with regard to them.

Advocates of the single gold standard.

M. Feer Herzog (Switzerland), M. Pirmez (Belgium), and Dr. Broch (Norway) proceeded at once to expose the economic fallacies and practical impossibilities involved in the United States proposals, and argued strongly in favour of a single gold standard. We ourselves considered that the impossibilities of establishing a Bi-metallic system by common agreement for all the world were so obvious that it was scarcely worth while to argue on the matter, while we declined, as also unnecessary, any discussion of the general merits of a single or a double standard. Those who were advocates at the Conference of a single gold standard, and opponents of Bi-metallism in any form were indeed so vigorous and capable that any further development of

this aspect of the question seemed scarcely needed. On the contrary, we were unanimously of opinion that it was wise to place before the Conference some considerations which, in our judgment, might be adduced against what may be called a propaganda in favour of a single gold standard in countries where it has not yet been introduced. There appeared to us to be some danger lest the natural opposition which the proposals of the United States called forth should be carried to the extent of an argument or a declaration, still further impugning the position of silver as a factor of currency. We considered that, while a universal double standard was a utopian impossibility, a single gold standard throughout the world would be a false utopia, and that further steps in that direction might tend to produce incalculable disasters to the commerce of the world.

Objections to the universal demonetization of silver.

We thought, too, that if the propositions of the American delegates should be simply rejected, that rejection might be erroneously interpreted by the public, who might see in such a declaration a verdict given against the use of silver as money. The future situation of silver might thus be further compromised, and an impression produced which would not be in accord with the opinions of the great majority of the Conference.

It was clear that in the American text there was one declaration for which nearly all the delegates might vote, and to which we ourselves were prepared to subscribe; that is to say, that it was not desirable that silver should cease to be one of the monetary metals. The American proposals exaggerated the position which it was either desirable or possible to secure for silver, but it appeared to be expedient that this error in their proposals should not induce the other members of the Conference to pronounce a condemnation of silver which would not be within their thoughts. "While putting aside entirely the question of the double standard, there was another question which appeared to be practical and useful to put, viz., assuming that the general double standard proposed by the United States could not be adopted, what would be the future of silver; what would be the policy to be pursued; towards what aim ought the various States to direct their efforts? This aim we considered to be to keep silver in the position which it occupies at present as the partner or natural ally of gold in all parts of the world, *where it might be possible to do so.* We considered that a campaign undertaken against silver would be exceedingly dangerous, even for the countries who have given a position as legal tender only to gold."*

We did not feel that we were precluded from taking up this ground by the fact that the English Government, not less than the English public, are perfectly determined to abide by a gold standard in the United Kingdom. The enormous interests of England in India gave us as good a locus standi, as regards the question, as that of the representatives of any other country, and we were able to point out to the Conference that the English came with the cleanest possible hands before the Conference in this respect. It could not be urged against us that we were arguing against the abandonment of silver in other countries, and had at the same time taken steps ourselves to limit the use of silver in our dependencies where a silver currency existed. We were able to point out that while the Latin Union and Holland had restricted the free coinage of silver, in India no steps against silver had as yet been taken. What would have been the position of silver, we were able to ask, if the metal had been demonetized in India as it had been demonetized elsewhere?

We further showed that in the controversy in favour of a single gold standard the question as to the mode in which existing stocks of silver were to be disposed of had been insufficiently considered. It was assumed that States would endeavour to rid themselves of their silver currency at the earliest possible date, but if this policy were followed by many Governments, what buyers would there be for the silver to be disposed of? How could it be assumed that silver would be bought, if simultaneous steps were taken everywhere for its disuse as an active agent in the currency? Consequently, the further prosecution of the policy in favour of as universal a gold standard as possible would be likely to cause a further depreciation of silver, the propor-

* Procès-verbaux, 3me Séance, p. 56.

tions of which it was impossible to foresee. The monetary and commercial disturbances which would be produced by such a fall could be readily imagined, nor could the actual loss which would fall on various States be left out of account. The position of France, with an amount of silver in circulation, or in the hands of the banks, amounting to from 80,000,000*l.* to 100,000,000*l.*, is well known; but few countries would be able to congratulate themselves upon exemption from the common misfortune of a further fall in silver. The case of Belgium was quoted at the Conference with special reference to the somewhat extreme views held by the Belgian Government with regard to the adoption of a single gold standard for the countries included in the Latin Union. Little silver is now circulated in Belgium itself, but Belgian coins to the extent of from 12,000,000*l.* to 15,000,000*l.* are in circulation in France, or in the hands of the Bank of France. According to the terms of the Convention these coins would be demonetized in France by the dissolution of the Latin Union. They would then be returned to Belgium where they naturally are a legal tender, and either the Belgian Government or the Belgian public would have to bear the loss of the depreciation. The loss which would be incurred in the Eastern dependencies of the British Empire and of Holland was of course patent to all. Nothing surely would create greater disorders in the economic situation and produce a more disastrous crisis than a general effort on the part of all States to rid themselves of their silver at the same time.

A further point would be whether, if there should be a further considerable disuse of silver, and especially if the countries which have now a forced paper currency should ultimately adopt a gold circulation, the demand for gold would not be so great as to render it difficult for the existing supplies to bear the strain, and whether the additional demand for gold might not cause formidable convulsions in trade and finance?

We were unanimously and emphatically of opinion that it was better that the currency of the world should continue to rest upon the two metals than that any efforts should be made to displace silver from its share in performing the work of the currency at large.

We think we may fairly state that the considerations thus put forward did not fail to produce some effect, even upon the representatives of States who had hitherto been most active in the propaganda for the adoption of a single gold standard, and the feeling was general that it would be wiser not to give a simple negative to the proposals of the United States Commissioners, but to make a declaration in reply, which, while it should distinctly exclude any misapprehension with regard to the possibility of the adoption of a common relation between gold and silver by a universal international agreement, should also embody an opinion that silver should continue to share the work of currency with gold. Accordingly, the following answer was drawn up:—

Amendment to the United States Resolutions.

The Conference wish to express their sincere thanks to the Government of the United States of America for having procured an international exchange of opinion upon a subject of so much importance as the monetary question.

Having maturely considered the proposals of the Delegates of the United States, the Conference recognises:

1. *That it is necessary to maintain in the world the monetary functions of silver, as well as those of gold, but that the selection for use of one or the other of these two metals, or of both simultaneously, should be governed by the special situation of each State or group of States.*
2. *That the question of the restriction of the mintage of silver should equally be left to the discretion of each State or group of States, according to the particular position in which they may be placed; and the more, in that the disturbance which in recent years has been produced in the silver market has variously affected the monetary situation of the several countries.*
3. *That the differences of opinion which have appeared, and the fact that even the States in which the double standard exists find it impossible to enter into any engagement with regard to the unlimited coinage of silver, preclude the discussion of the question of establishing an international relation of value between the two metals.*

These resolutions were agreed to by all the representatives, except those from Italy and the United States, and were presented to the Conference by M. Léon Say. The Italian delegates had offered a strenuous opposition to the text of the declarations, being, as we have elsewhere stated, exceedingly urgent that the various States of Europe should remain perfectly free with regard to the adoption of the double standard. M. Rusconi, on behalf of himself and M. Baralis, ultimately submitted the following reservations in the form of a distinct motion:—

Reservations of the Italian Delegates.

"1. *That in adopting the proposed formula, the Conference gives no reply to the question before it, and that, in deliberately avoiding any statement as to the possibility or impossibility of establishing a fixed ratio between gold and silver by means of an international convention, it leaves its task incomplete.*

"2. *That, since the French law established such a relation, none but unimportant oscillations have occurred in the value of the two metals, whatever may have been the variations in the product of the mines.*

"3. *That, consequently, if the French law has been able to obtain by itself this result, à fortiori, such a relation would be established on a base so firm that it would remain unshaken, from the date on which such States as France, England, and the United States of America agreed to fix mutually, by an international law, the value of the two coined metals.*"

Declarations against the principle of a double standard.

No support was given to this motion, but the fact of these reservations having been put forward made us consider it necessary to be still more explicit with reference to the American proposals than we had been before. Mr. Goschen accordingly, in order to avoid any risk of misapprehension, took the opportunity of stating that he and his colleagues, while not in favour of the universal adoption of a single gold standard, considered that the establishment of a fixed ratio of gold and silver was utterly impracticable, and that they were opposed to a system of currency based upon a double standard. M. Feer Herzog, M. de Thoerner, and M. Garnier, made similar declarations on behalf of Switzerland, Russia, and Belgium; but M. de Kuefstein, for Austro-Hungary, accepted the resolutions only on the ground that they committed the delegates to no opinion in either direction, and did not assert the impossibility of such an arrangement as had been contemplated by the United States. Your Lordships will, however, gather that with these exceptions the impossibility of such an arrangement was practically admitted by the whole of the rest of the members, side by side with their declaration of opinion that it was necessary to maintain in the world the monetary functions of silver as well as those of gold.

Change of opinion since 1867.

Though the declaration thus arrived at by a very large majority, that it is necessary to maintain in the world the monetary functions of silver as well as those of gold, may be characterised as a truism to a certain extent, we desire to point out that this expression indicates a distinctly different result from what was arrived at in the year 1867, when the international Monetary Conference met in Paris. That Conference, as well as the Royal Commission which sat in 1868, definitely recommended the universal adoption of a gold standard; but it must be remembered that both bodies assembled at a period when the discoveries of gold in California and Australia had caused silver to disappear entirely from the countries whose monetary system was based upon the double standard. That apprehension has now been replaced by the opposite apprehension that silver might be so plentiful that it might be inexpedient to retain it for purposes of legal tender.

If, as the result of the present Conference, the United States Commissioners are able to take back to their country information that the adoption of the universal gold standard commends itself less to the judgment of the nations of Europe than it apparently did in the year 1867, on the other hand no statements were made at the Conference which would justify them in claiming any increased adhesion to the doctrine of a double standard in any country, or in assuming that, if they persevere in their attempt, they are likely to find active allies.

Prospects of the silver market.

We regret that more light was not thrown in the Conference on the probable prospects of the silver market. Considerable discussion took place as to what the silver causes were most potent in determining the price of silver, M. Feer Herzog con-

tending that the demand for India was the main determining cause of the rise and fall in the price of silver, and attributing very little weight either to the stock of silver in Germany, or to the suspension of the coinage in the Latin Union, while others argued very strongly that the existence of a large stock in the hands of Germany, who were ready to be sellers at any moment, exercised a predominating influence over the market at the present time, and that the suspension of the coinage of silver in the Latin Union had also contributed in a very large degree to the fall. Mr. Gibbs pointed out to the Conference what a very different effect would be produced by a stock of silver in the hands of a Government anxious to sell from an equal amount produced from the mines in ordinary course. M. Feer Herzog used the argument that, as little silver had been coined in a given time by the nations of the Latin Union prior to the suspension of the coinage, that suspension could not have greatly influenced the market, but we were unable to share that view. The privilege possessed by silver of being coined into legal tender at any moment, prior to the suspension of free coinage in the Latin Union, gave that metal a value which it has lost. It was certainly a privilege which would have tended to arrest the fall. The statement of this fact was on one occasion considered by one of the members of the Conference as an unfavourable criticism on the conduct of the Latin Union, but this was a misapprehension. They may have been perfectly right in the policy they adopted, while at the same time that policy may have aggravated the existing difficulties. The Latin Union, too, were free to adopt this course as, through the operation of the double standard, the suspension of the coinage of one metal did not deprive those who might have payments to make of the means of obtaining legal tender. The situation in this respect was different from the situation of India, where, if the free coinage of silver into rupees had been stopped, the supply of legal tender would have been entirely arrested. With regard to the stock of silver in Germany, it was estimated at the Conference to range between 16,000,000*l.* and 18,000,000*l.* It has hitherto apparently been impossible to ascertain the intentions of the German Government with reference to the disposal of the remaining surplus, or even to estimate with any certainty the amount of the balance yet unsold. The Select Committee of 1876 examined very carefully the various estimates which were submitted at that time, and which ranged between eight and thirty millions sterling, but they were unable to arrive at any definite opinion. They reported that "Germany has still to dispose of an amount which is certainly not less "than eight millions, with a possibility that it may exceed twenty millions." M. Feer Herzog, in a pamphlet recently published, takes the same estimate as the Select Committee of the amount of old coinage in circulation at the close of the year 1871, viz., 59,000,000*l.*, and he states that nearly 20,000,000*l.* of this amount have been used in the new coinage, while over 27,000,000*l.* have been converted into bullion. Of this latter amount rather more than 23,000,000*l.* had been sold. This would leave a balance of about 16,000,000*l.* to be disposed of, including bullion and coin still in circulation. But all such accounts are necessarily imperfect as sales continue to be made, and notwithstanding the care which has been taken in the framing of these estimates, the result must be considered entirely conjectural.

Estimates of amount of silver held by Germany.

We wish to call special attention to the serious disadvantage which the Conference experienced through the absence of a Representative from Germany.

Invitation from the Conference to the German Government.

The Conference at its second meeting, which was the first for business purposes, expressed a wish that the German Government might once more be requested (and this time not in the name of the United States alone, but of the Conference itself,) to attend their deliberations. It was to be distinctly understood that the presence of a representative should in no way be considered to indicate any possibility that the German Government would depart from the policy, which it deliberately adopted in 1870, of a single gold standard; but the fluctuations in the silver market and the general perturbation, which have arisen from the course followed by Germany, had clearly so very important a bearing on the whole question, that the explanations of a German Delegate as to the amount of silver which the German Government might still have to throw upon the market, would have been of the greatest value.

No Government represented at the Conference has shown any reticence whatever as to their intentions. All have acted with the greatest frankness, and have spoken without reserve. Germany alone has stood aloof.

It may be contended that the statistical information published by Germany is all that can be expected to be obtained from them, but these statistics threw comparatively little light on the future sales likely to be made by Germany, and scarcely tend to remove the great obscurity which exists in that respect. It may be contended again that, as sellers, it would not be to their interest to disclose either their present situation, or their future plans, but it is perfectly clear that the German Government themselves, as sellers, are suffering from the course which is being pursued. We are convinced, and we believe that in this we faithfully represent the general opinion, that however large the stock in Germany may still be, the silver market would be relieved of a great pressure if it were known what the extreme limits are within which further sales may be expected, and that nothing could exercise a more depressing influence on the market, than the existing state of perplexity and doubt.

The refusal of the German Government to take part in any common deliberations naturally produced a painful impression.

We scarcely know whether it is within our competence to make a suggestion, but if we may be permitted to do so, we would press upon Her Majesty's Government the extreme importance of urging on the German Government, through Her Majesty's Representative in Berlin, how great would be the benefit if Germany, like the other States in Europe, would contribute a frank and complete statement of the situation of silver within the limits of her Empire, and of the policy intended to be pursued. The derangement in mercantile operations due to the position of silver at this moment is so great and so universal that all contributions made in the direction of clearing up the subject would be invaluable, and hailed with satisfaction by all who are interested in the question.

Conclusion.

We must, in conclusion, express our regret, that owing to the nature of the circumstances under which the Conference assembled, and the instructions given to most of the representatives who attended it, it has not been in our power to present a more interesting report, or at least one leading to some practical result, and affording some solution of the great difficulties affecting the silver question. But we cannot but hope that some advantage may have resulted from the exchange of views which has taken place between the representatives of the various countries, and the modifications in the opinions of some of them, which may be traced to the discussions which have taken place. Your Lordships are aware that, as regards ourselves, it did not lie within our functions or our instructions to initiate any proposals, tending in any way to compromise either the Home Government or the Government of India. At the same time, as has appeared from the observations we have made, we trust we may be considered to have made some contributions towards arresting what might be a suicidal tendency in several quarters to hasten the disuse of silver as currency.

Your Lordships will also observe that much valuable information is contained in the documents which are annexed to the procès-verbaux. In particular, we would call attention to the very useful tables with reference to the relation which silver has borne to gold at different periods since the sixteenth century, and with regard to the intrinsic value of the existing gold coins; also to the diagram representing the fluctuations of the London silver market during the last six years. We also trust that the statements presented by the Delegates, relating to the monetary system of the countries which they severally represented, will be valuable to the student of currency questions. Similar information, in a very carefully prepared form, was appended to the Report of the Royal Commissioners of 1868, but during the last 10 years so many changes have taken place, that, although the laws have been duly reported and their effects clearly explained by the Deputy Master of the Mint in his annual reports, we cannot but think that it will be useful for future reference that statements of the currency laws of the different European Powers, as they at present exist, should be gathered together in one volume.

We have, &c.

(Signed) GEORGE J. GOSCHEN.
HENRY H. GIBBS.
T. L. SECCOMBE.

27th November 1878.

W. B. GURDON,
Secretary to the Commissioners.

No. XIV.

CONVENTION MONÉTAIRE ENTRE LA BELGIQUE, LA FRANCE, LA GRÈCE, L'ITALIE ET LA SUISSE, Signée à Paris le 5 Novembre 1878.

Sa Majesté le Roi des Belges, le Président de la République Française, Sa Majesté le Roi des Hellènes, Sa Majesté la Roi d'Italie et la Confédération Suisse,

Désirant maintenir l'Union monétaire établie entre les cinq États et reconnaissant la nécessité d'apporter à la Convention du 23 Décembre 1865 les modifications réclamées par les circonstances, ont résolu de conclure, à cet effet, une nouvelle convention, et ont nommé pour leurs plénipotentiaires, savoir :

Sa Majesté le Roi des Belges, M. Eudore Pirmez, membre de la Chambre des Représentants, M. Auguste Garnier, Conseiller de la Légation de Belgique à Paris, et M. Adolphe Sainctelette, commissaire des Monnaies ;

Le Président de la République Française, M. Léon Say, Ministre des finances, M. Charles Jagerschmidt, Ministre plénipotentiaire, M. Paul-Auguste-Gabriel Musnier de Pleignes, Directeur du mouvement général des fonds au Ministère des finances, et M. Jean-Louis-André Ruau, Directeur de l'Administration des monnaies et médailles ;

Sa Majesté le Roi des Hellènes, M. Nicolas-P. Delyanni, Chargé d'affaires de Grèce à Paris ;

Sa Majesté le Roi d'Italie, M. le comte Charles Rusconi, Référendaire au Conseil d'État, M. le commandeur César Baralis, Directeur de la Monnaie de Milan, et M. Constantin Ressman, Secrétaire de légation de première classe ;

Le Conseil Fédéral de la Confédération Suisse, M. Charles Feer-Herzog, membre du Conseil national, et M. Charles-Édouard Lardy, Conseiller de la Légation suisse à Paris.

Lesquels, après s'être communiqué leurs pleins pouvoirs respectifs, trouvés en bonne et due forme, sont convenus des articles suivants :

Article premier.

La Belgique, la France, la Grèce, l'Italie et la Suisse demeurent constituées à l'état d'Union pour ce qui regarde le titre, le poids, le diamètre et le cours de leurs espèces monnayées d'or et d'argent.

Art. 2.

Les types des monnaies d'or frappées à l'empreinte des Hautes Parties contractantes sont ceux des pièces de 100 francs, de 50 francs, de 20 francs, de 10 francs et de 5 francs, déterminés, quant au titre, au poids, à la tolérance et au diamètre, ainsi qu'il suit :

Nature des Pièces.		Titre.		Poids.		Diamètre.
		Titre droit.	Tolérance du titre tant en dehors qu'en dedans.	Poids droit.	Tolérance du poids tant en dehors qu'en dedans.	
	francs.	millièmes.	millième.	grammes.	millièmes.	millimètres.
Or	100	900	1	32.258 06	1	35
	50			16.129 03		28
	20			6.451 61	2	21
	10			3.225 80		19
	5			1.612 90	3	17

Les Gouvernements contractants admettront sans distinction dans leurs caisses publiques les pièces d'or fabriquées, sous les conditions qui précèdent,

dans l'un ou l'autre des cinq États, sous réserve, toutefois, d'exclure les pièces dont le poids aurait été réduit par le frai de 1/2 p. 0/0 au-dessous des tolérances indiquées plus haut, ou dont les empreintes auraient disparu.

Art. 3.

Le type des pièces d'argent de cinq francs frappées à l'empreinte des Hautes Parties contractantes est déterminé, quant au titre, au poids, à la tolérance et au diamètre, ainsi qu'il suit :

Nature de la Pièce.	Titre.		Poids.		Diamètre.
	Titre droit.	Tolérance du titre tant en dehors qu'en dedans.	Poids droit.	Tolérance du poids tant en dehors qu'en dedans.	
	francs.	millièmes.	millièmes.	grammes.	millièmes.	millimètres.
Argent	5	900	2	25	3	37

Les Gouvernements contractants recevront réciproquement dans leurs caisses publiques lesdites pièces d'argent de cinq francs, sous la réserve d'exclure celles dont le poids aurait été réduit par le frai de 1 p. 0/0 au-dessous de la tolérance indiquée plus haut, ou dont les empreintes auraient disparu.

Art. 4.

Les Hautes Parties contractantes s'engagent à ne fabriquer des pièces d'argent de 2 francs, de 1 franc, de 50 centimes et de 20 centimes que dans les conditions de titre, de poids, de tolérance et de diamètre déterminées ci-après :

Nature des Pièces.	Titre.		Poids.		Diamètre.
	Titre droit.	Tolérance du titre tant en dehors qu'en dedans.	Poids droit.	Tolérance du poids tant en dehors qu'en dedans.	
	fr. c.	millièmes.	millièmes.	grammes.	millièmes.	millimètres.
Argent	2 00	835	3	10 00	5	27
	1 00			5 00		23
	0 50			2 00	7	18
	0 20			1 00	10	16

Ces pièces devront être refondues par les Gouvernements qui les auront émises, lorsqu'elles seront réduites par le frai de 5 p 0/0 au-dessous des tolérances indiquées plus haut, ou lorsque leurs empreintes auront disparu.

Art. 5.

Les pièces d'argent fabriquées dans les conditions de l'article 4 auront cours légal, entre les particuliers de l'État qui les a émises, jusqu'à concurrence de 50 francs pour chaque payement. L'État qui les a mises en circulation les recevra de ses nationaux sans limitation de quantité.

Art. 6.

Les caisses publiques de chacun des cinq États accepteront les monnaies d'argent fabriquées par un ou plusieurs des autres États contractants conformément à l'article 4, jusqu'à concurrence de 100 francs pour chaque payement fait auxdites caisses.

Art. 7.

Chacun des Gouvernements contractants s'engage à reprendre des particuliers ou des caisses publiques des autres États les monnaies d'appoint en argent qu'il a émises et à les échanger contre une égale valeur de monnaie courante en pièces d'or ou d'argent fabriquées dans les conditions des articles 2 et 3, à condition que la somme présentée à l'échange ne sera pas inférieure à 100 francs. Cette obligation sera prolongée pendant une année à partir de l'expiration de la présente Convention.

Art. 8.

Le Gouvernement italien ayant déclaré vouloir supprimer ses coupures divisionnaires de papier inférieures à 5 francs, les autres États contractants s'engagent, pour lui faciliter cette opération, à retirer de leur circulation et à cesser de recevoir dans leurs caisses publiques les monnaies italiennes d'appoint en argent.

Ces monnaies seront admises de nouveau dans les caisses publiques des autres États contractants, dès que le régime du cours forcé du papier-monnaie aura été supprimé en Italie.

Il est entendu que, lorsque les opérations relatives au retrait de la circulation internationale des monnaies italiennes d'appoint en argent auront été terminées, l'application des dispositions de l'article 7 sera suspendue à l'égard de l'Italie.

Art. 9.

Le monnayage des pièces d'or fabriquées dans les conditions de l'article 2, à l'exception de celui des pièces de 5 francs d'or, qui demeure provisoirement suspendu, est libre pour chacun des États contractants.

Le monnayage des pièces de 5 francs d'argent est provisoirement suspendu. Il pourra être repris lorsqu'un accord unanime se sera établi, à cet égard, entre tous les États contractants.

Art. 10.

Les Hautes Parties contractantes ne pourront émettre des pièces d'argent de 2 francs, de 1 franc, de 50 centimes et de 20 centimes frappées dans les conditions indiquées par l'article 4, que pour une valeur correspondante à 6 francs par habitant.

Ce chiffre, en tenant compte des derniers recensements effectués dans chaque État, est fixé :—

	fr.
Pour la Belgique, à - - -	33,000,000
Pour la France et l'Algérie, à -	240,000,000
Pour la Grèce, à - - -	10,500,000
Pour l'Italie, à - - -	170,000,000
Pour la Suisse, à - - -	18,000,000

Seront imputées sur les sommes ci-dessus les quantités déjà émises jusqu'à ce jour par les États contractants.

Art. 11.

Le millésime de fabrication sera inscrit, en conformité rigoureuse avec la date du monnayage, sur les pièces d'or et d'argent frappées dans les cinq États.

Art. 12.

Les Gouvernements contractants se communiqueront annuellement la quotité de leurs émissions de monnaies d'or et d'argent, ainsi que toutes les dispositions et tous les documents administratifs relatifs aux monnaies.

Ils se donneront également avis de tous les faits qui intéressent la circulation réciproque de leurs espèces d'or et d'argent, et spécialement de tout ce qui parviendrait à leur connaissance au sujet de la contrefaçon ou de l'altération de leurs monnaies dans les pays faisant ou non partie de l'Union, notamment en ce qui touche aux procédés employés, aux poursuites exercées et aux répressions obtenues ; ils se concerteront sur les mesures à prendre en commun pour prévenir les contrefaçons et les altérations, les faire réprimer partout où elles se seraient produites et en empêcher le renouvellement.

Ils prendront, en outre, les mesures nécessaires pour mettre obstacle à la circulation des monnaies contrefaites ou altérées.

Art. 13.

Toute demande d'accession à la présente Convention, faite par un État qui en accepterait les obligations et qui adopterait le système monétaire de l'Union, ne peut être accueillie que du consentement unanime des Hautes Parties contractantes.

Art. 14.

L'exécution des engagements réciproques contenus dans la présente Convention est subordonnée à l'accomplissement des formalités et règles établies par les lois constitutionnelles de celles des Hautes Parties contractantes qui sont tenues d'en provoquer l'application, ce qu'elles s'obligent à faire dans le plus bref délai possible.

Art. 15.

La présente Convention, exécutoire à partir du 1er Janvier 1880, restera en vigueur jusqu'au 1er Janvier 1886.

Si, un an avant ce terme, elle n'a pas été dénoncée, elle sera prorogée de plein droit, d'année en année, par voie de tacite reconduction, et demeurera obligatoire jusqu'à l'expiration d'une année après la dénonciation qui en serait faite.

Art. 16.

La présente Convention sera ratifiée et les ratifications en seront échangées à Paris dans le délai de huit mois, ou plus tôt si faire se peut.

En foi de quoi, les Plénipotentiaires respectifs l'ont signée et y ont apposé le cachet de leurs armes.

Fait en cinq expéditions, à Paris, le 5 Novembre 1878.

(L.S.) Signé : EUDORE PIRMEZ.
(L.S.) GARNIER.
(L.S.) AD. SAINCTELETTE.
(L.S.) LÉON SAY.
(L.S.) CH. JAGERSCHMIDT.
(L.S.) P. MUSNIER DE PLEIGNES.
(L.S.) L. RUAU.
(L.S.) N.-P. DELYANNI.
(L.S.) C. RUSCONI.
(L.S.) C. BARALIS.
(L.S.) RESSMAN.
(L.S.) FEER-HERZOG.
(L.S.) LARDY.

ARRANGEMENT relatif à l'EXÉCUTION de l'ARTICLE 8 de la CONVENTION MONÉTAIRE du 5 Novembre 1878.

Les Gouvernements de Belgique, de France, de Grèce, d'Italie et de Suisse, ayant résolu d'un commun accord d'exécuter, avant l'entrée en vigueur de la Convention monétaire conclue à la date de ce jour entre les cinq États, les dispositions contenues dans le paragraphe premier de l'article 8 de la dite Convention, dispositions ainsi conçues :—

" Le Gouvernement italien ayant déclaré vouloir supprimer ses coupures divisionnaires de papier inférieures à cinq francs, les autres États contractants s'engagent, pour lui faciliter cette opération, à retirer de leur circulation et à cesser de recevoir dans leurs caisses publiques les monnaies italiennes d'appoint en argent ; "

Les Soussignés, dûment autorisés, sont convenus des articles suivants :

Article Premier.

Le retrait des monnaies italiennes de 20 centimes, 50 centimes, 1 franc et 2 francs, qui existent en Belgique, en France, en Grèce et en Suisse, devra être achevé le 31 Décembre 1879.

A partir de cette date, ces monnaies cesseront d'être reçues dans les caisses publiques des États susmentionnés.

Art. 2.

Les pièces retirées de la circulation en Belgique, en Grèce et en Suisse, seront, dans le mois qui suivra la clôture du retrait, remises au Gouvernement français, qui, se chargeant de les centraliser pour les transmettre au Gouvernement italien, en effectuera le remboursement, au comptant, aux Gouvernements des trois États précités, en y ajoutant les frais.

Art. 3.

Le compte des pièces retirées de la circulation en Belgique, en France, en Grèce et en Suisse, sera arrêté, entre la France et l'Italie, au 31 janvier 1880.

Les Gouvernements français et italien ayant évalué le montant des pièces divisionnaires italiennes existant dans les quatre États à la somme de 100 millions, dont 13 millions en Belgique, en Grèce et en Suisse, et 87 millions en France, ce compte comprendra, d'abord, jusqu'à concurrence de 13 millions au maximum, les pièces provenant de la Belgique, de la Grèce et de la Suisse, et, jusqu'à concurrence de 87 millions au maximum, les pièces retirées de la circulation en France.

Il comprenda ensuite, et séparément, l'excédant de ces sommes, s'il y a lieu.

Ladite somme de 100 millions et l'excédant éventuel prévu au paragraphe précédent seront portés au débit du Gouvernement italien dans un compte courant dont les intérêts seront réglés au taux de 3 p. 0/0 l'an, payables en numéraire, à partir du jour où les pièces retirées auront cessé d'avoir cours dans les quatre États.

Art. 4.

Le Gouvernement français transmettra au Gouvernement italien, dans les localités que celui-ci désignera sur la frontière française ou à Civita-Vecchia; les pièces qui auront été centralisées conformément aux articles précédents. Les monnaies provenant de la Belgique, de la Grèce et de la Suisse, seront comprises dans ces envois jusqu'à concurrence de 13 millions, et celles provenant de la France jusqu'à concurrence de 87 millions.

Art. 5.

Le remboursement par le Gouvernement italien des pièces qui lui auront été remises jusqu'à concurrence des 100 millions, formant la première partie du compte prévu à l'article 3, aura lieu à Paris. Il s'effectuera, soit en or, soit en pièces de cinq francs d'argent, soit en traites sur Paris, soit en bons du Trésor italien payables à Paris, et se fera dans les conditions suivants :

	francs.	francs.
1° Au comptant :		
Pièces provenant de la Belgique, de la Grèce et de la Suisse	13,000,000	30,000,000
Pièces provenant de la France	17,000,000	
2° Dans le courant de l'année 1881		23,300,000
Dans le courant de l'année 1882		23,300,000
Dans le courant de l'année 1883		23,400,000
Total		100,000,000

Le Gouvernement italien se réserve, d'ailleurs, la faculté de se libérer par anticipation.

Art. 6.

S'il s'est produit des excédants de retrait en sus des 13 et 87 millions dont il est question aux articles 3 et 4, les pièces composant ces excédants seront tenues à la disposition du Gouvernement italien, qui en remettra la contre-valeur au comptant lorsqu'il en prendra livraison.

Il est toutefois entendu que la livraison et le remboursement s'effectueront au plus tard en même temps que la dernière des annuités spécifiées à l'article 5.

Dans le cas où, au contraire, la totalité des pièces retirées n'atteindrait pas la somme de 100 millions, la diminution dans les payements à effectuer portera sur la dernière des annuités ci-dessus spécifiées.

Art. 7.

Le Gouvernement italien s'engage, conformément à sa déclaration énoncée au paragraphe 1er de l'article 8 de la Convention monétaire conclue en date de ce jour, à retirer de la circulation et à détruire, au plus tard dans les six mois qui suivront la remise de la totalité des pièces divisionnaires visées à l'article 5, la totalité de ses coupures de papier inférieures à cinq francs. Il s'engage, en outre, en vue de rétablir définitivement sa circulation métallique, à n'en point émettre de nouvelles.

En exécution de l'article 12 de la Convention monétaire précitée, le Gouvernement italien communiquera aux autres Gouvernements de l'Union un état des retraits et des destructions qu'il aura effectués, et ce dans le délai de quatre mois après l'accomplissement de ces opérations.

Art. 8.

Le Gouvernement italien remboursera au Gouvernement français, en même temps que la première des annuités spécifiées à l'article 5, les frais de toute nature, y compris les frais de transport à la frontière, auxquels donneront lieu les opérations prévues par le présent arrangement, ces frais ne pouvant, dans aucun cas, dépasser la somme de 250,000 francs.

Art. 9.

Le présent Arrangement sera ratifié, et les ratifications en seront échangées, à Paris, en même temps que celles de la Convention monétaire conclue à la date de ce jour entre les cinq États.

En foi de quoi, les Soussignés ont signé le présent Arrangement et y ont apposé le cachet de leurs armes.

Fait en cinq expéditions, à Paris, le 5 Novembre 1878.

(L.S.)	Signé :	EUDORE PIRMEZ.
(L.S.)		GARNIER.
(L.S.)		AD. SAINCTELETTE.
(L.S.)		LÉON SAY.
(L.S.)		CH. JAGERSCHMIDT.
(L.S.)		P. MUSNIER DE PLEIGNES.
(L.S.)		L. RUAU.
(L.S.)		N.-P. DELYANNI.
(L.S.)		C. RUSCONI.
(L.S.)		C. BARALIS.
(L.S.)		RESSMAN.
(L.S.)		FEER-HERZOG.
(L.S.)		LARDY.

DÉCLARATION relative à la FABRICATION de la MONNAIE D'ARGENT pendant l'année 1879.

Les Soussignés, Délégués des Gouvernements de Belgique, de France, de Grèce, d'Italie et de Suisse, s'étant réunis en Conférence en exécution de l'article 4 de la Déclaration monétaire du 3 Février 1876 dont l'application avait été reportée, d'un commun accord, à l'année 1878, et dûment autorisés à cet effet, ont, sous réserve de l'approbation de leurs Gouvernements respectifs, arrêté les dispositions suivantes :

Article premier.

Les Gouvernements de Belgique, de France, de Grèce, et de Suisse s'engagent, pour l'année 1879, à ne pas fabriquer et à ne pas laisser fabriquer de pièces d'argent de cinq francs.

Art. 2.

Le Gouvernement italien est exceptionnellement autorisé à faire fabriquer, pendant l'année 1879, une somme de vingt millions de francs en pièces d'argent de cinq francs.

Art. 3.

Les cinq Gouvernements contractants s'engagent à ne pas délivrer de bons de monnaie d'argent pendant l'année 1879.

Art. 4.

La présente Déclaration, exécutoire à partir du 1er Janvier 1879, sera ratifiée et les ratifications en seront échangées aussitôt que faire se pourra.

En foi de quoi, les Délégués respectifs ont signé la présente Déclaration et y ont apposé le cachet de leurs armes.

Fait en cinq expéditions, à Paris, le 5 Novembre 1878.

(L.S.)	Signé : EUDORE PIRMEZ.
(L.S.)	GARNIER.
(L.S.)	AD. SAINCTELETTE.
(L.S.)	LÉON SAY.
(L.S.)	CH. JAGERSCHMIDT.
(L.S.)	P. MUSNIER DE PLEIGNES.
(L.S.)	L. RUAU.
(L.S.)	N. P. DELYANNI.
(L.S.)	C. RUSCONI.
(L.S.)	C. BARALIS.
(L.S.)	RESSMAN.
(L.S.)	FEER-HERZOG.
(L.S.)	LARDY.

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